

RELATIONSHIPS BETWEEN EMOTIONAL INTELLIGENCE
AND DEMOGRAPHIC VARIABLES WITHIN FLORIDA'S
INMATE POPULATION

By

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This dissertation is dedicated to the memory of my father, Raymond H. Hodges, Sr. My father did not live to see me complete this journey, but I know how proud he would have been of his "little girl." The legacy he left me included a belief in hard work and strength of spirit. Without those foundations, I would not have been able to complete this journey.

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The problem addressed in this study was to determine the emotional intelligence of Florida's inmate population and the relationships between emotional intelligence and variables within the inmate population. A random sample, stratified by institution, of 1,000 inmates at six Florida correctional facilities, five institutions housing male inmates and one housing female inmates, was drawn. All inmates eligible for special education services at each of the six institutions were added to the random sample and asked to participate in this study, bringing the total sample size to 1,241. Of this group, 300 chose to participate in this study.

The Mayer-Salovey-Caruso Emotional Intelligence Test developed by John D. Mayer, Peter Salovey and David R. Caruso determined emotional intelligence. Five research questions were developed to determine the relationship between emotional

intelligence and nine variables within the inmate population. Analysis of variance, logistic regression and linear regression models were used to examine relationships between the variables.

Results of the analysis of variance indicated that emotional intelligence was significantly related to academic functioning, ethnicity, and the interaction between ethnicity and gender. No significant relationships were discovered between emotional intelligence, and special education identification, age, age at initial incarceration, gender, and number of incarcerations. A regression analysis was used to determine the interaction between emotional intelligence and the number of disciplinary reports received during incarceration. There was no significant relationship between emotional intelligence and the number of disciplinary actions received during incarceration. A logistic regression analysis was used to examine the relationship between emotional intelligence and the type of crime committed. Emotional intelligence showed no predictive relationship to the type of crime committed.

CHAPTER 1 INTRODUCTION

High-risk offenders generally lack the cognitive, behavioral, and social skills necessary for success as productive members of society. These skill deficits may undermine the habitual offender's efforts to remain in society, even after periods of incarceration. In order to reduce recidivism, periods of incarceration need to be augmented by programming designed to address these deficits. (Blinn 1995, p. 146)

Although correctional education programs are a factor in lowering the rate of recidivism, many released offenders recidivate, after having caused harm to citizens and property, thus creating an additional burden on taxpayers. According to a Bureau of Justice report of released offenders in 13 states, "an estimated 62.5% were rearrested for a felony within 3 years, 22.7% of all prisoners were rearrested for a violent offense within 3 years of their release" (Beck & Shipley 1987, p.1). Many of those arrested were arrested for multiple crimes.

An estimated 67,898 of the 108,580 prisoners who were released in 1983 were rearrested . . . the new charges included 2,282 homicides, 1,451 kidnappings, 1,291 rapes, 2,626 other sexual assaults, 17,060 robberies and 22,633 other assaults. More than 40 of the new charges were for property offenses . . . released prisoners were rearrested for an estimated 51,262 larcenies, 36,483 burglaries, and 20,233 fraud offenses. (p. 3)

The formulas used to determine the success or failure of released offenders differ from state to state and also from federal to state prison systems, making comparisons between programs difficult. In the State of Florida, the Florida Department of Corrections 2000-2001 Annual Report (Florida Department of Corrections 2001a) indicates that 47.7% of all incoming inmates had at least one prior commitment. This recidivism rate is relatively low in comparison with other states, and is lower than

Florida's 1996 recidivism rate of 55.8%. The number of vocational and academic programs offered by the Florida Department of Corrections may be a factor in lowering the rate of recidivism.

The Florida Department of Corrections offers academic and vocational programs to prepare released offenders for entry-level employment. However, the skills needed for job attainment may not be the same skills needed for job retention. Based on 1999 releases of nearly 600,000 offenders, Petersilia (2000) predicted that over the next five years approximately 3 million offenders will be released into communities across the nation and that these persons represent significant risk to persons and property. The skills needed for successful transition to society require more than entry level academic functioning and vocational skills.

Emotional intelligence, often referred to as social competence or social-emotional skills, may be a factor in determining who will be successful upon release. Research may provide information that could assist those in corrections in providing the social and emotional skills needed to increase the likelihood of successful re-entry into society. There is no doubt that employees must have minimum job skills for the workplace, but it is becoming more evident that academic and vocational training is not enough. According to a study of competence models for 181 positions in 121 companies and organizations worldwide, Goleman (1998) reports "67 percent of the abilities deemed essential for effective performance were emotional competencies . . . compared to IQ and expertise, emotional competence mattered twice as much. This held true across all categories of jobs, and in all kinds of organizations" (p. 31). Determining whether emotional competencies are "twice as important in contributing to excellence as pure

intellect and expertise" (p. 31) may be difficult to confirm in quantitative measures, but few would argue the importance of social skills in the workplace. Many corporations, including American Express, are now using measures of emotional intelligence as part of the screening procedure in their hiring process.

Statement of the Problem

Education of offenders is a factor in their post-release success, leading to reduced recidivism. Educational and vocational skills are not enough, however, as the recidivism rate of released offenders continues to increase. The rising cost to persons and property, in addition to the high costs of incarceration, necessitates the further study of other factors that may relate to the success of released offenders. Many offenders lack the social and emotional skills to help them establish and maintain social and work relationships. New theories of emotional intelligence and ways of assessing emotional intelligence could provide a framework in determining another factor related to post-release success of offenders.

There has been little research on the relationship between emotional intelligence and the offender population; however there has been research involving emotion and those with behavioral disorders. The relationship between persons with emotional behavioral disorders, conduct disorders or specific learning disabilities and the incidence of aggressive behavior, anti-social functioning and criminal behavior has been the focus of numerous studies (e.g., Charlebois, LeBlanc, Larives & Gagnon 1994; Guevremont & Dumas 1994; Shapiro, DuPaul & Bradley-Klug 1998; McDougall 1998;).

Purpose of the Study

The purpose of this study is to examine the relationships in Florida's offender population between scores of emotional intelligence, as assessed by the Mayer-Salovey-

Caruso Emotional Intelligence Test (MSCEIT), and various demographic factors within this population. These demographic factors include type of crime(s), eligibility for special education services, age, age at initial incarceration, academic functioning (based on Test of Adult Basic Education), ethnicity, gender, number of incarcerations, and the number of disciplinary reports received during incarceration.

Research Questions

This study will examine the following research questions:

1. Is there a relationship between emotional intelligence and offenders who are eligible for special education services?
2. Is there a relationship between emotional intelligence and gender?
3. Is there a relationship between emotional intelligence and age?
4. Is there a relationship between emotional intelligence and age at initial incarceration?
5. Is there a relationship between emotional intelligence and type of crime? In the context of this study, the type of crime will be considered either violent or non-violent.
6. Is there a relationship between assessed emotional intelligence and academic functioning as assessed by the Test of Adult Basic Education (TABE)?
7. Is there a relationship between emotional intelligence and the number of disciplinary reports received during incarceration?
8. Is there a relationship between emotional intelligence and the number of incarcerations?
9. Is there a relationship between emotional intelligence and ethnicity?

Delimitations of this Study

The following delimitations may affect the research collected by this study:

1. The sample study will be limited to offenders in Florida.
2. Identification of those eligible for special education services is limited to those under the age of 22. It is likely that many more offenders have been eligible, or would have been had they attended school regularly prior to incarceration.

Limitations of this Study

The following limitations may affect the research collected by this study:

1. Offenders are wary of the underlying reasons for testing and may try to manipulate their responses.
2. The poor academic skills of the offender population may influence scores on the MSCEIT (Mayer-Salovey-Caruso Emotional Intelligence Test), as there is a moderate correlation between verbal intelligence and emotional intelligence (McCrae 2000).

Definition of Terms

Correctional Education is the term used for educational programs within the Florida Department of Corrections (FDC). Education programs are not available in all correctional facilities and the programs offered differ from institution to institution. Overall, the following services are offered in various locations within the Department of Corrections: adult basic education, leading to a General Equivalency Diploma (GED), special education, vocational programs, volunteer literacy, Title I, Even Start and computer assisted technology.

Education Supervisor is the job title used to identify the person who supervises education, library and wellness programs in correctional facilities. The position is synonymous with that of a public school principal.

Regional Program Manager is the job title used to identify the person supervising all education, library and wellness programs in a region. The position is synonymous with that of a district superintendent.

Workforce development programs are vocational programs within Florida's Department of Corrections. Workforce development programs include such skills as automotive technology, computer electronic technology, masonry, welding, cosmetology, cabinetry and more.

Youthful Offender Facility, or Y-O Camp, refers to a correctional facility that houses youthful offenders. A youthful offender is one who committed a crime prior to his or her 21st birthday, is less than 24 years old, has a sentence of 10 years or less, and must be on his or her first prison commitment. Capital or life felons may not be classified as youthful offenders.

Close Management or CM refers to facilities that have at least one maximum-security housing unit for close management offenders. Those confined to close management have exhibited repeated aggressive or violent behaviors during incarceration. Education services are provided to offenders confined to close management.

Emotional intelligence is the set of abilities that account for how people's emotional perception and understanding vary in their accuracy.

Mayer and Salovey (1997) define emotional intelligence as follows:

Emotional intelligence involves the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth. (p. 10)

MSCEIT (Mayer-Salovey-Caruso Emotional Intelligence Test) is the instrument used in this study to assess emotional intelligence. The MSCEIT "indexes how accurately a person can read and express emotion and how well a person can compare that emotional stimulation with other sorts of sensory experiences" (Mayer 2001, p. 33).

TABE refers to the Test of Adult Basic Education, the standard academic assessment for offenders in the Florida Department of Corrections. Scores on the TABE are used to determine eligibility to take the GED test as well as eligibility for enrollment in vocational programs.

Justification for the Study

Education Supervisors in correctional institutions are responsible for providing academic and vocational training programs for offenders. Unlike educators in traditional school environments, educators in correctional facilities hope they never see their students again, at least not in an institutional setting.

Correctional educators will continue to be challenged to plan, implement, and evaluate quality programs to meet the needs of the inmates and to contribute to the growth and development of individuals who have the capability to be law-abiding, productive, contributing members of society. Correctional educators will be challenged to look back and to look forward to plan the future. (Ryan 1995, p. 64)

As transition services become more of a priority, Education Supervisors need to look at new tools in evaluating the needs of offenders in the context of providing the social and emotional needs, as well as academic and technical needs for successful re-entry into society. The stated goal of the Department of Corrections is to provide for public safety. This is often interpreted as providing strict institutional controls. However, as most offenders eventually return to society, the greater threat to public safety may be from those who are released.

The Department of Corrections commitment to public safety requires more than simply keeping offenders segregated from society. Most offenders will eventually return to society, many of them to the same communities where they committed criminal acts. It is in the best interest of public safety to investigate all factors related to the success of released offenders. Every factor addressed may provide for an increase in public safety. Many employers, perhaps as many as 65%, will not knowingly hire an ex-offender (Petersilia 2000). If released offenders cannot find employment, they may believe criminal activity is their only alternative. Offenders need to develop the emotional and social skills to respond to the problems they will encounter upon release, including the

ability to appropriately respond to societal rejection. Understanding the social and emotional issues facing offenders requires appropriate assessment tools for determining the emotional strengths and needs of this population. The MSCEIT may be beneficial in providing a framework in curriculum development and training to increase the opportunities for social and emotional learning. It is thought that emotional intelligence is learnable (Caruso & Wolfe, 2001). There is much work to be done in understanding behavior, emotion and cognition, but assessment may provide a foundation for future investigation.

Summary

Chapter 1 included an overview of the concepts of emotional intelligence and the offender population, purpose of the study, research questions, limitation and delimitations of the study, definition of terms and justification for the study. Chapter 2 follows with a review of literature related to the questions posited in Chapter 1. Chapter 3 presents the methodology used in this study. Chapter 4 presents the characteristics of the population used in this study followed by results of the Mayer-Salovey-Caruso Emotional Intelligence Test on the research hypotheses. Chapter 5 provides discussion of the research findings and possible recommendations for future research.

CHAPTER 2 REVIEW OF LITERATURE

When in an emotional state, people are often thoroughly wrapped up in what they are doing and feeling, and so they do not see beyond the immediate situation to broader issues, principles, and implications. There is a fair amount of evidence that when people are upset—that is, during an emotional state marked by unpleasantness and high arousal—they do not think things through adequately before acting. Instead they seem to act on the first impulse or option that strikes them in a positive way. The emotion seems to narrow their focus to their own immediate concerns and they do not consider all the alternatives or other outcomes. (Baumeister 1999, p. 278)

The purpose of this study is to examine the relationships in Florida's offender population between scores of emotional intelligence, as assessed by the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), and various demographic factors within this population. These demographic factors include type of crime(s), eligibility for special education services, age, age at initial incarceration, academic functioning (based on the Test of Adult Basic Education), ethnicity, gender, number of incarcerations, and the number of disciplinary reports received during incarceration.

Understanding the relationships among behavior, emotion and cognition is important in understanding the framework of emotional intelligence. This review of literature focuses on the underlying principles of various theories of intelligence and the evolving foundation underlying the theories of emotional intelligence. This review will also address the various factors of the offender population that will be included in this research.

Theories of Intelligence

Intelligence is subject to neurological, physiological, psychological and cultural interpretations. Pre-historic man was no doubt continually occupied with the challenge of survival, but modern man has been, it seems, fascinated with the physiological and psychological workings of the brain. Since the earliest recorded studies of the brain and early views of the mind, there have been two basic theories of the brain's functioning: (a) the brain functions as one unit, and (b) the brain is divided into various areas that relate to different intellectual capabilities. LeDoux (1996) cited the late 18th century work of Franz Joseph Gall, who theorized the concept of phrenology. Phrenologists thought physical aspects of the brain and head, such as size, shape, and contours, related to intelligence. Franz Gall was one of the early phrenologists. Gall's theories were based on the physical structure of the brain. He believed that the physical size of the brain correlated to intellectual functioning. He and his colleague, Joseph Spurzheim, theorized there were 37 organs of the mind (Gardner 1983). Gall's theory of phrenology was popular in Europe and his beliefs were endorsed by many scientists of the day. Modern research has disproved his theories, as there has been no evidence that the physical size of the brain correlates in any way to intellectual functioning. Despite the failing of Gall's theory of brain size, some of his beliefs were accurate. He believed that the brain's cognitive functioning was compartmentalized into separate areas. Pierre-Paul Broca also theorized brain size was relative to intellectual capacity (Gould 1996). In 1861, a Frenchman, Gratiolet, challenged Broca's theory that brain size accounted for intellectual differences. Broca believed white Europeans had larger brains and were, therefore, more intelligent than Africans or other non-European whites. Despite questionable motives,

Broca found useful information about the brain. He found that lesions on certain areas of the brain restricted specific cognitive functioning. His work focused on the linguistic area of the brain, now referred to as Broca's area (LeDoux 1996).

In 1869, British mathematician Francis Galton, a cousin of Charles Darwin, published his views on the heritability of human intellect (Brody 2000). He believed ancient Greeks were superior to his contemporaries in England, but that the English were superior to those of African descent. Galton used his background in mathematics to rank humans in terms of intellectual and physical strengths. In 1904, Alfred Binet, a French psychologist, and his colleague, Theodore Simon, developed a general-purpose intelligence test to assess the school-readiness of children in Paris. In contrast to Galton's test that focused on simple cognitive skill, Binet's assessment focused on more complex mental processes. Binet hoped that his test would be used to identify deficiencies and remediate problem areas (Gould 1996). Ironically, Binet feared that his test might be used as a tool to rank order children rather than as a tool to help remediate academic deficiencies. Jean Piaget, working in Simon's laboratory, was more interested in how children reasoned in determining wrong answers. He felt there was more to be learned about the mental processes children used in selecting the wrong answer rather than emphasizing the incorrect choice (Gardner 1983).

Some educators have criticized what is now known as the Stanford-Binet intelligence assessment, in part due to its lack of usefulness in predicting anything other than one's success in school, which, it may be argued, was the purpose of Binet's test. Current critics of standardized tests maintain these types of tests tell us only what socio-

economic background the tester came from and how well he or she may perform on other similar tests (Kohn 2001).

Another popular assessment of intelligence is the Wechsler intelligence test developed by David Wechsler. Despite the reliance on such measures of intelligence, Wechsler believed that there were non-intellective as well as intellective elements involved in the brain's functioning (Cherniss 2000). Currently, the Wechsler (WAIS-III), Woodcock-Johnson (WJ-R), and Kaufman Adolescent and Adult Intelligence Test (KAIT) are popular tests of intelligence (Kaufman 2000).

Intelligence is usually viewed as either a unitary measurement or as a multi-faceted measurement. Charles Spearman first developed a concept of a single overriding measure of intelligence he termed "g" for general intelligence (Gardner 1999). Thurstone and Guilford (as cited in Gardner 1983) believed there were numerous factors or vectors of the mind. There is little doubt that some theorists have used measures of intelligence to separate classes of people. Measurement of intellectual ability has always created controversy as some have used the results of intelligence testing to further racial and cultural prejudices. According to Herrnstein and Murray (1994), the endowment of intellectual capacity is greater in whites and lesser in African-Americans and other minorities. Murray further denounces the long-term effect of slavery on African-Americans, stating that "African blacks in fact have lower test scores than American blacks" (p. 565). It might be noted that Native Americans also score less than European-Americans on intelligence tests (Loehlin 2000). Gardner (1999) indicates the obsession with intelligence is mostly a product of Western culture, as other cultures either have no concept of intelligence or a concept much different from that tested in Western culture.

Despite the popularity of IQ testing, many researchers have questioned the theory of a general assessment of intellectual functioning. At the heart of many criticisms is the inability of intelligence tests to predict work or life successes. Critics charge that IQ testing is racially discriminatory and that intelligence tests are more reflective of social-economic class differences than differences in intellectual abilities. Stephen J. Gould (1996) expressed the belief that mental tests, such as IQ tests, are primarily used for two purposes: 1) maintenance of social ranks, and 2) as a tool to back up those who believe in hereditarianism. Fischer, Hout, Jankowski, Lucas, Swidler and Voss of the Department of Sociology at University of California, Berkeley, combined to write *Inequality by Design: Cracking the Bell Curve Myth* (1996), a rebuttal to *The Bell Curve*, criticizing the research design of Murray and Herrnstein's book. They also questioned the motives behind Murray and Herrnstein's theories. They believe a focus on IQ is an attempt to minimize the societal problems in our country and rationalize unfair treatment of minorities. Some critics (e.g., Lincoln, 1997) go so far as to claim there should be criminal liability for their statistical misconduct and racist motives.

The controversy surrounding the cultural and social-economic biases of intelligence measures are furthered by an overview of those who construct the measures. Part of the controversy arising from intelligence testing is that white, middle-class males of European descent have constructed nearly all measurements of intelligence. This, in itself, does not invalidate the assessments, but it may be that there are cultural differences in the definition of intelligence. One can look back briefly upon American history and determine that measures of traditional intelligence focusing on language and mathematical skills would discount the intellect of the indigenous peoples of America.

Loehlin (2000) reports that “Typically, Native American groups obtain lower verbal IQs” (p. 180). Despite their lack of formal skills in language and mathematics, their civilizations survived and thrived until the European invasion.

Standardized tests may in themselves define differences between cultures and the variations of how specific cultures view intelligence. For example, American Indian culture traditionally teaches core values of belonging, mastery, independence and generosity (Brendtro & Brokenleg 1996) rather than skill in language or mathematics.

The Concept of Multiple Intelligences

Many researchers, sociologists, psychologists and educators have challenged the view of traditional theories of intelligence by postulating alternative theories of human intellectual functioning. Howard Gardner (1983) challenged the concept of a unitary overall intelligence in his theory of multiple intelligences. Gardner proposed seven different types of intelligences. Gardner’s original seven intelligences are linguistic, musical, logical-mathematical, spatial, bodily-kinesthetic, interpersonal and intrapersonal intelligences. Of these seven intelligences, only two—linguistic and mathematical—are used in traditional assessments of intelligence. His belief that these seven areas currently qualify as intelligences is based on eight criteria:

1. Potential isolation by brain damage. This is the extent that a particular faculty can be destroyed or spared in isolation, as a result of brain damage.
2. The existence of idiots savants, prodigies, and other exceptional individuals. This is the discovery of an individual who exhibits a highly uneven profile of abilities and deficits.

3. An identifiable core operation or set of operations. This is the existence of one or more basic information-processing operations or mechanisms, which can deal with specific kinds of input.

4. A distinctive developmental history, along with a definable set of expert performances. Intelligence should have an identifiable developmental history.

5. An evolutionary history and evolutionary plausibility. A specific intelligence becomes more plausible to the extent that one can locate its evolutionary antecedents.

6. Support from experimental psychological tasks. Using the methods of the cognitive psychologist, one can, for example, study details of linguistic or spatial processing with exemplary specificity.

7. Support from psychometric findings. Outcomes of psychological experiments provide one source of information relevant to intelligences; the outcomes of standard tests (like I.Q. tests) provide another clue.

8. Susceptibility to encoding in a symbol system. Much of human representation and communication of knowledge takes place via symbol systems—culturally contrived systems of measuring which capture important forms of information. (Gardner 1983)

Gardner did not feel this number was definitive but believed that further study of multiple intelligences would uncover more intelligences. Since writing *Frames of Mind*, he has added two intelligences—naturalist and existentialist—to the list (Gardner 1999).

The Study of Emotion—An Evolving Science

Throughout the history of academia, there has been a reluctance to view emotion as a productive force in the development of intellectual capacity. Standardized tests have focused on skills of linguistic and mathematical ability. Emotions, it seemed, were the

opposite of rationality, and rationality is inferred as synonymous with intelligence. Not only is it thought that emotion itself is irrational, but even the study of emotion is thought to be irrational (Damasio 1999). The rise of positivism and behavioralism furthered the belief that only what can be observed or experienced through the senses is meaningful (Phillips & Burbules 2000). The logical positivists endorsed B. F. Skinner's view that "psychology should restrict itself to the study of behavior, for only behavior is observable" (p. 9).

Humans are the most intelligent of creatures, but also the most emotional (LeDoux 1996). To deny our emotional being may be to deny our humanity. Nevertheless, many persons in academia would hesitate to consider emotion a subject worthy of research. Skinner was the father of behavioralism and he has had a great influence in the field of psychology. He believed that as emotion could not always be seen, it could not be observed and measured; consequently it was not worthy of research. It may be noted that many researchers of influence were interested in the study of emotion, including Freud and Darwin, two of the most influential thinkers in modern history. Darwin (1965) was more noted for his study of evolution, but he also had great interest in the study of emotions. Darwin studied the various facial and body expressions of emotions across cultures and species, comparing similarities and differences. Research on the expression of emotion was viewed as difficult, as individuals varied on the amount of emotion physically displayed. Freud was interested in the idea that previous emotional experiences could influence present and future behaviors (Damasio 1999). In the United States the 1960's and 1970's brought many societal changes, among them the belief in a

more open society, a society perhaps more able to deal with the study of emotion as part of the human framework.

Gardner's (1983) theory of multiple intelligences challenged the view of the traditional intelligence quotient and brought inquiry into the nature of other intelligences, including affective intelligences, to the educational environment. In 1990, Salovey and Mayer introduced the concept of and coined the term for "emotional intelligence" (Mayer, Salovey & Caruso 2000a). Goleman (1995) popularized the concept of emotional intelligence in his book of that title.

Theories of Emotion

Emotion is not easily quantifiable, thus perhaps leading to a lack of scientific research into its nature. Damasio (2000) points out the reluctance of researchers to study the field of emotion because "emotion was not trusted, in real life or in the laboratory" (p. 12). Damasio sets forth his belief that the absence of emotion in decision-making may be as dangerous as allowing emotion to rule logic. "Perhaps emotion does have some rationality built in to it; perhaps it embodies a logic of survival in evolution; perhaps it does have a value in social communication . . . (p. 14). Many researchers make a stark distinction between "emotion" and "feeling." Bernet (1996) defines these differences as follows:

Feelings are physical sensations within the body such as warmth, tension, pulsation, pleasure, pain, flow, and motion; they may occur at the visceral, muscular, vascular, surface, or any other level of the body. They are a part of the striving for homeostasis. When feelings are evaluated and interpreted, at any level of consciousness, the process becomes an emotion. (p. 2)

Lazarus (1991) views the differences between feelings and emotions similarly:

These terms are often used interchangeably, but I think it would be more precise to speak of feeling as sensory perception, as in feelings of pain,

pleasure, and distaste, rather than as emotion. Although we speak constantly about feelings when we mean emotions, and I have sometimes done so a bit carelessly in this book, it is more precise to restrict the word feeling to the awareness of bodily sensations and to reserve the word emotion for occasions on which there has been an appraisal of harm or benefit. Similarly, although it is fashionable to speak of affect rather than emotion to refer to the subjective quality of an emotional experience, I think it would be better to use the generic term emotion rather than to refer to a single facet to stand for the whole. (p. 57)

Damasio (2000) believes that emotion and feelings differ, but that feeling is simply a shortcut for the feeling of emotion. His distinction between the terms is that a feeling is a very private designation and an emotion is more public. In his explanation, he notes that no one knows what you may be feeling, but others can view your emotions. "Emotions and feelings are part of a continuous process, but the relative publicness of emotions and the complete privacy of feelings indicate that the mechanisms along the continuum are quite different" (p. 15).

Perhaps our failure to include emotion in areas of hard science is not because we refuse to believe emotions play an active role, but rather the study of emotional concepts is thought to be too subjective. Although reasoning ability and emotion are often viewed as contrasts, it is far more likely that the interactions within the human brain are too complex to be viewed as separate functions. In Lazarus' (1991) cognitive-motivational-relational systems theory of emotion, he proposes that emotions are integral in appraising our environment. Continual feedback and interpretation of the environment is possible only when our emotional being is involved in the interpretation of events. Our emotional being assists in evaluating the significance of events. Lazarus does not believe emotions and cognition should be viewed separately. "Although knowledge is the cold cognitive stuff of which personal meaning is made, it is not an appraisal with its personal heat until

the implications for personal well-being have been drawn" (p. 145). Emotions are necessary to interpret whether or not an event is negative or positive using the emotional interpretation of the context. Lazarus gives the analogy of an athlete who may feel pain and fatigue while conditioning or practicing and views the pain as a positive event. The same athlete who experiences similar pain and fatigue during a competitive race may view these feelings negatively. Lazarus' theory of emotion views emotion as the interpreter of an event within a particular context.

LeDoux (1996) agrees to a great extent with Lazarus' appraisal theory, but adds that in order to turn appraisals into emotions, the amygdala must be activated.

In sum, connections from the amygdala to the cortex allow the defense networks of the amygdala to influence attention, perception, and memory in situations where we are facing danger. At the same time, though, these kinds of connections would seem to be inadequate in completely explaining why a perception, memory, or thought about an emotional event should 'feel' different from one about a nonemotional event. They provide working memory with information about whether something good or bad is present, but are insufficient for producing the feelings that come from the awareness that something good or bad is present. (p. 285)

LeDoux hypothesizes a continuous appraisal-feedback loop, but other researchers do not agree. Lane and Nadel (2000) claim that feedback is not critical in the experience of emotions, but in other ways they concur with LeDoux (1996) in believing "emotions may be conditioned and use thalamic limbic circuits" (p. 339).

Epstein (1998) challenges the views of LeDoux (1996) and Goleman (1995) in assessing certain "emotions occur automatically because of hard-wired neurological connections" (p. 10). Epstein believes that we operate with two minds, the "experiential mind, which learns directly from experience" (p. 9) and "a rational mind, which operates according to logical inference" (p. 9). Darwin (1965) believes that emotions cannot be

grouped together; that we have little control over some emotions and other emotions are adaptations to the environment. He uses the fact that people born blind have many emotions accompanied with expression identical to those born with sight. He believes that other gestures, those not universal across cultures, are learned through the environment.

The complexity of the neurological and biological processes of the brain cannot be summarized within the constraints of this research. Suffice it to say, however, that despite a lack of study on emotion there has been an exceptional amount of research conducted on the brain's processing; neurological, cognitive, and biological sequencing of the brain's activities; as well as a plethora of research on personality and trait theory. While the concept of emotional intelligence seeks to separate from trait or personality theory, in many ways research in all these areas contribute to the evolving research on the human species.

The Concept of Emotional Intelligence

Gardner's (1983) theories of multiples intelligences may have been the impetus behind the theories of emotional intelligence. Although emotional intelligence, by that term, was not one of Gardner's seven intelligences, two of his intelligences are similar to the concept of emotional intelligence. These two intelligences are intrapersonal and interpersonal intelligence. Gardner refers to them as personal intelligences and describes them as follows: "intrapersonal intelligence is involved chiefly in an individual's examination and knowledge of his own feelings, while the interpersonal intelligence looks outward, toward the behavior, feelings, and motivations of others" (pp. 240-241).

Salovey and Mayer (1990) were the first theorists to use the term emotional intelligence. They initially defined emotional intelligence as “the subset of social intelligence that involves the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use that information to guide one’s thinking and actions” (p. 189). Over the years, Mayer, Salovey, and Caruso have, individually and collectively, used various definitions of emotional intelligence, but in most writings refer back to the Mayer and Salovey (1997) definition:

Emotional intelligence involves the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth. (p. 10)

Goleman (1998) defines emotional intelligence as referring to “the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships” (p. 317). McDowelle and Bell (1997) of East Carolina University offer yet another definition: “Emotional intelligence is defined as the ability to recognize feelings, control emotional balance, maintain a positive attitude when confronted by frustrations and difficulties, and connect with the feelings of others” (p. 2).

Cooper and Sawaf (1997) developed their theory of emotional intelligence using their four cornerstone model:

Emotional literacy, which builds a locus of personal efficacy and confidence through emotional honesty, energy, awareness, feedback, intuition, responsibility, and connection.

The second cornerstone, emotional fitness, builds your authenticity, believability, and resilience, expanding your circle of trust and your capacity for listening, managing conflict, and making the most of constructive discontent. In emotional depth, the third cornerstone, you explore ways to align your life and work with your unique potential and purpose, and to back this with integrity, commitment,

and accountability, which, in turn, increase your influence without authority. From here you advance to the fourth cornerstone, emotional alchemy, through which you extend your creative instincts and capacity to flow with problems and pressures and to compete for the future by building your capabilities to sense more readily—and access the widest range of hidden solutions and emerging opportunities. (pp. xxvii-xxviii).

Gardner (1983) and other proponents of the concept of the emotional aspects of intelligence do not discount the importance of traditional measures of intellect, but support a more holistic view encompassing the elements of both cognitive and emotional functioning.

In discussions of emotional intelligence, it is clear there are many contrasting views of the concept. Averill (2000) asks the important question of whether it is the intelligent use of emotions or a study of emotion as an intelligence that we are really seeking. Averill further suggests that our quest to encompass emotions into an IQ type framework may have the opposite effect envisioned by proponents of emotional intelligence. It may serve as simply another way to rank humans and discriminate between those considered intelligent and less intelligent.

Emotional intelligence is a relatively new study and the various constructs and definitions have led to confusion on what should be studied and how it should or could be studied. As Hedlund & Sternberg (2000) explain:

Definitions of social and emotional intelligence range from specific, cognitive factors (such as social judgment, emotion perception) to all-encompassing models that include personality (such as extroversion), motivational (such as achievement orientation), and cognitive ability (such as problem-solving) factors. Adding confusion to the issue is the overlap in some approaches to measuring social and emotional intelligence (such as decoding nonverbal information, interpreting affective information). (p. 157)

These authors further respond to the questions of how the management of emotions or tasks relates to intelligence:

The ability to acquire knowledge, whether it pertains to managing oneself, managing others, or managing tasks, can be characterized appropriately as an aspect of intelligence. It requires cognitive processes such as encoding essential information from the environment and recognizing associations between new information and existing knowledge. The decision to call this aspect of intelligence social, emotional, or practical intelligence will depend on one's perspective and one's purpose. Ultimately, it will be important to assess empirically the relations among these constructs and integrate them into a unified model in order to avoid a run-away proliferation of 'intelligences.' (p. 158)

Matthews and Zeidner (1990) hypothesize that the concept of emotional intelligence may only be beneficial if there is an overall quotient, similar to "g" in traditional intelligence tests, representing an overall emotional ability. They believe that such a "g" could be possible by assessing core abilities in the areas of processes, behaviors and outcomes.

Research in the area of emotional intelligence has followed one of two paths; the cognitive model and the trait or personality model, although some researchers are using a mixed model with components from both the cognitive model and the trait model. Corresponding to these models are different assessments: performance and self-assessment. Ciarrochi, Chan, Caputi, & Roberts (2001) explain the differences between self-report and performance assessments of emotional intelligence:

Self-report measures of EI tend to be related to well-established personality traits and in particular the various factors comprising the Big Five factor model. Performance measures of EI, on the other hand, tend to be less related to personality measures, sharing overlap instead with traditional intelligence measures. (p. 30)

The emotional intelligence model of Mayer and Salovey (1997) assumes emotional intelligence is correlated, yet distinct from other intelligences. They distinguish emotional intelligence from traits; "in this way, we distinguished a mental skill that could

legitimately be called emotional intelligence (e.g., being able to figure out one's own and others' emotions) from preferred ways of behaving (e.g., being sociable or warm)" (p. 8).

Studies of emotional intelligence in the school setting have generally focused on the emotional abilities of administrators in dealing with personnel issues or as change agents in the school. Little research has focused on the evaluation of emotional intelligence in determining the needs of the students. Such evaluations may be particularly useful in determining the needs of at-risk students, students with learning and/or emotional problems and students in correctional facilities.

Variables Addressed in this Study

For the purposes of this study, emotional intelligence will be determined by the overall scores of the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT).

Type of Crime and Emotional Intelligence

Offenders who committed crimes involving property were 13.9% more likely to reoffend. Offenders who were involved in violent offenses are 31.9% less likely to reoffend, according to Florida Department of Corrections statistics (2001b). This statistical analysis indicates the "relative influence of each factor when controlling for all others" (p. 4). These statistics while somewhat surprising, may indicate that there is some emotional regulation in criminal behavior as those who are involved in offenses involving property are more likely to reoffend than those who commit violent offenses. Length of sentence is also a factor in the reoffense rate as the reoffense probability drops by 1.2% for each additional year served" (p. 4). This research will examine correlates between type of crime and components of emotional intelligence. In particular, this research will look for correlates between assessed scores of emotional intelligence and

those who commit crimes against persons (violent) and those who commit crimes against property (non-violent).

It is unlikely that emotions cause violent behavior, but framing life events within various emotional frameworks may cause one to rationalize or justify violent behavior. Impulsive behavior and poor self-regulation are factors in criminal behavior and are linked to emotional intelligence. Many people may have violent thoughts, and may even believe acts of violence could be justified. Most people, however, regulate their actions through internal restraints.

The immediate, proximal cause of violence is the collapse of these inner restraining forces. This point is crucial, because it means that many of our efforts to understand violence are looking at the questions the wrong way. To produce violence, it is not necessary to promote it actively. All that is necessary is to stop restraining or preventing it. Once the restraints are removed, there are plenty of reasons for people to strike out at each other. (Baumeister 1999, p. 163)

It is likely that most people develop an emotional framework for understanding and interpreting life events. It is equally likely that those who commit violent acts interpret life events differently from those who do not commit violent acts. Baumeister's (1999) research indicated "bullies, wife-beaters, tyrants, and other violent people tend to think that other people are attacking or belittling them, even when others would not have the same interpretation" (p. 43). Perpetrators of violent crimes tend to minimize their role by rationalizing and justifying their actions.

One of the components of emotional intelligence is the ability to perceive and identify emotions in oneself and others. Studies have shown the amygdala is involved in the ability to perceive and identify emotions (Aggleton & Young 2000, Gardner 1995, & LeDoux 1996). Although all criminals are not psychopaths, psychopathic individuals are more likely to commit crimes and spend more time in prison before the age of 40 than

non-psychopathic individuals (Stevens, Charman & Blair 2001). Psychopathic children are less likely to recognize sad and fearful emotion in facial expressions and vocal tone than non-psychopathic children. Amygdala dysfunction at an early age may be a factor in the development of psychopathic tendencies. The amygdala is involved in emotional memory (LeDoux 1996). Goleman (1995) says it is amygdala arousal that causes us to remember where we were when traumatic events, such as the Challenger explosion or the Kennedy assassination occurred. The hippocampus plays an important role in memory, but the amygdala determines the emotional importance of the memory.

The path to violent behavior appears to begin early in life. Children who have poor social skills suffer from peer rejection (Arlie, Gable, & Hendrickson 1994). Children who suffer from peer rejection tend to act out aggressively and affiliate with anti-social peer groups (Guevremont & Dumas 2002, Charlebois et al. 1994).

Children assessed with learning disabilities or behavioral disorders are more likely to suffer from peer rejection and exhibit poor social skills. In a longitudinal study to determine the predictability of arrest, Doren, Bullis and Benz (1996) found that males with disabilities were 2.37 times more likely to be arrested sometime during their school years than their non-disabled peers. Students who had low scores in social achievement were 2.31 times more likely to be arrested than those who scored in the average range. The combination of drop-out status and low social achievement increased the likelihood of arrest by 5.86 times. The highest arrest rate, however, was the identification of severely emotionally disabled (SED) youths. The arrest rate of students identified as SED was 13.3 times that of their non-disabled peers.

In a study of children, aged 7–14 (Eisenberg, Fabes & Losoya 1997), it was found that children who were more likely to have externalizing behavioral problems were less likely to identify and understand their own emotions. In a continuing longitudinal study, Eisenberg et al. report, “for boys and girls combined, those high in negative emotional intensity and low in constructive coping and attentional regulation were low in both peer acceptance and social skills” and further that “emotionality and regulation were fairly good predictors of children’s, especially boys’, social functioning” (p. 138). Youth identified with emotional disabilities are more likely to be involved in anti-social behaviors than their non-disabled peers (Bullis & Yovanoff 2002). Bullis, Bull, Johnson and Johnson (1994) found that many of the difficulties young adults with emotional behavioral disorders (EBD) face in society are due to poor social skills. Wehby (1994) reports that “aggressive children lack the necessary skills for interacting competently with peers” (p. 25). Aggressive and disruptive behavior is the primary problem of students with emotional difficulties. Without interventions, aggressive behavior tends to remain stable over time, increasing the risks of children dropping out of school and participating in criminal activities. Aggressive children tend to socialize with other aggressive children from as early as pre-school (Farmer, Farmer, & Gut 1999) and these deviant social peer groups may be a factor in the development of violent behavior. Aggressive children are more likely to over-react to perceived threats from peers than non-aggressive children (Marcus & Kramer 2001). Aggressive children are more likely to be rejected by their peers, leading to the creation of deviant peer groups.

Miller-Johnson, Coie, Maumary-Gremaud, Lochman & Terry (1999), found peer rejection and aggressive behavior in early childhood as a predictor of criminal behavior

in adolescence, particularly among boys. Poor social skills may result in the development of deviant peer groups increasing the likelihood of delinquent behavior. In a longitudinal study of urban African-American youth, Miller-Johnson et al. found that peer rejection and aggressive behavior in childhood is predictive of serious felony assault and other criminal behavior in adolescence and beyond. These research findings correspond with elements of emotional intelligence. These researchers found that children who respond aggressively in social situations have difficulty recognizing strong emotions in others, tend to overestimate their own social competence and are less aware of how others view them.

Cognition is also a factor in violent behavior. Cognitive abilities assist in making decisions using emotional information. "One of the reasons that cognition is so useful a part of the mental arsenal is that it allows this shift from reaction to action" (LeDoux, p. 175). Baumeister (1999) claims that perpetrators of violent crime often focus on the techniques of the violent act rather than focusing on the broader implications to the both the victim and the perpetrator. It is a cognitive state Baumeister calls "a very concrete, narrow, rigid way of thinking" (p. 268).

Empathy, or the lack thereof, is often thought to be a factor in violent behavior. Beck (1999) reports, "Empathy for the object of hostility is often sufficient to inhibit the aggressor from inflicting an injury in the first place" (p. 19).

It is likely the roots of violent behavior are both cognitive and emotional. Mayer and Salovey's (1997) theory of emotional intelligence may be considered the intelligent use of emotional information. The study of emotional intelligence in the offender population, both with those who have committed violent acts and those who have

committed property crimes, may provide more information on the relationship between emotional intelligence and violence.

Emotional Intelligence and Special Education

Children with exceptionalities, by and large, have more difficulty in social situations and are more likely to develop anti-social behaviors than their non-disabled peers.

About half of all children with attention deficit-hyperactivity disorder (ADHD) have significant problems with their peer relationships. These social difficulties appear to be related to a high rate of intrusive behavior, deficits in conversation and reciprocity, social-cognitive biases, and poor emotional regulation. (Guevremont & Dumas 1994, p. 164)

Students with emotional behavioral disorders are more likely to drop out of school (Fulk, Brigham, & Lohman 1998). Their study concluded that participants identified with learning disorders were more likely than students identified with emotional behavioral disorders to believe the school's purpose was to prepare them for the job market. Participants identified with emotional behavioral disorders were more likely than those identified with learning disorders to exhibit externalized behavioral problems, often excluding them from the general education population. The greater alienation of learning disabled students when compared with emotional behavioral disordered students was an unexpected finding. "Common characterizations of students with EBD suggest that they would be more alienated than students with LD" (p. 307). Fulk et al. hypothesized that students with learning disorders may feel more alienated because they are more likely to be in regular education classes, while students with emotional behavioral disorders are more likely to be with other children with similar disorders and are less likely to be in general education classes.

“Deficiencies and failures in impulse control have been linked to a broad spectrum of personal and social problems, including addiction and substance abuse, crime, domestic violence, teen pregnancy, school failure, debt and bankruptcy, sexually transmitted diseases, smoking, and obesity” (Tice, Bratslavsky, & Baumeister 2001, p. 55). The cognitive model of emotional intelligence may provide insight into the perception and facilitation of emotions related to impulsive behavior and could provide assessment in promoting self-regulation. Richards and Gross (2000) have begun research on the connection between emotion regulation and cognitive functioning. Their research indicated suppression of emotion might inhibit cognitive functioning, particularly in the area of memory.

The National Longitudinal Transition Study (NLTS) cited by Doren et al. (1996), reported that within 2 years of leaving high school 37% of students identified as seriously emotionally disturbed (SED) had been arrested and 20% of those identified with a specific learning disability (SLD) had been arrested. Some studies indicate nearly 50% of incarcerated youth have a learning disability, and over 60% are identified with an emotional or behavioral disorder (Robinson & Rapport 1999). Specific learning disabilities and emotional disturbance are the most common disabilities of incarcerated youths eligible for special education services.

One of the problems in determining appropriate intervention and treatment is the failure to properly identify individuals with emotional disabilities. There is strong evidence to support comorbidity of learning disabilities and emotional disabilities, but it is the classic “what came first, the chicken or the egg?” story. Are individuals with academic disabilities more likely to have difficulties in social domains because of their

poor academic achievement, or are individuals who have problems with social acceptance destined to fail in the social setting of educational institutions? Children identified as having severe emotional disabilities (SED) have poor school or work outcomes (Rock, Messler, & Church 1997), but students with concomitance of learning disabilities and SED have the poorest outcomes.

Adding to the problems of children with SED is the under-identification of children with social and emotional problems. Handwerk and Marshall (1998) found few standard assessments for the identification of SED eligibility. Unlike Federal standards for learning disabilities, each state has different assessments for determining eligibility for SED. As emotion, behavior and cognition appear to be linked in some way, assessments of emotional intelligence may be beneficial in evaluating those with emotional disabilities.

Age and Emotional Intelligence *

Traditional assessments of intelligence show some improvement with age. Early research with the MSCEIT shows a similar and significant difference between emotional intelligence and age (Mayer, Salovey & Caruso 1999). The correlation between age and MSCEIT Total is $r(1602) = 0.03, p > .05$ (p. 74). “Younger offenders reoffend at much higher rates than older offenders (e.g., 2-year rate—under 18: 52.3% vs. age 35-49: 30.0%)” (Florida Department of Corrections 2001b). Florida Department of Corrections statistics further state that for each year older an inmate is at release, the reoffense probability drops by 2.1%. Additionally “younger offenders reoffend sooner after release than older age groups” (Florida Department of Corrections 2001b). Hedlund and Sternberg (2000) researched the factors of the Mayer, Salovey and Caruso model of

emotional intelligence and found “emotional intelligence of adults was higher than that of adolescents, suggesting age-related changes” (pp. 148-149).

Age at Initial Incarceration and Emotional Intelligence

Although there is little, if no, empirical evidence to support any theories on emotional intelligence and age at initial incarceration, some long term Department of Corrections employees (G. Myers, personal communication, March 19, 2003) observed that offenders seemingly do not mature emotionally beyond the age coinciding with their chronological age at initial entry into prison. There is, of course, research supporting the higher incidences of violent crimes, as well as higher rates of recidivism with younger offenders (Florida Department of Corrections 2001b). The U.S. Department of Justice reports that the “age at first adult arrest and recidivism were related regardless of the number of prior arrests” (p. 8).

The age at which a released prisoner was first arrested and charged as an adult was inversely related to recidivism: the younger the age at first arrest, the higher the rate of recidivism. An estimated 72.2% of the prisoners first arrested before the age of 18 were rearrested between age 25 and 29 and 26.6% of those first arrested at age 30 or older. (U.S. Department of Justice 1997, p. 8)

Disciplinary Reports Received During Incarceration and Emotional Intelligence

This study will examine the relationship between the number of disciplinary reports received during incarceration and emotional intelligence. Disciplinary reports indicate an offender, even in a controlled environment, is exhibiting anti-social and anti-authoritarian behaviors. Information from the 2001 Florida Department of Corrections (2001b) Recidivism Report indicates the “reoffense probability rises by 1.6% for each additional disciplinary report received” (p. 4). It may be postulated that offenders who receive more disciplinary reports fail to manage and regulate their emotions appropriately. It may also

be that they fail to recognize emotional levels in those who are their custodians in the system and may not understand how to defuse emotional situations. Offenders need to learn to perceive, interpret and manage emotional information, if they are to integrate successfully into society upon release.

Academic Functioning and Emotional Intelligence

The third branch of emotional intelligence, understanding emotion, should have the highest correlation to general IQ (Mayer et al. 2001). Affect may be an important factor in academic achievement, "a learner's contribution to a learning situation is not exclusively limited to his or her available skills, but also involves motivational, affective, and emotional aspects related to personal equilibrium capacities" (Gonzalez-Pienda, Nunez, Gonzalez-Pumariega, & Alvarez 2002, p. 265).

"Research consistently illustrates that poor academic achievement is a major factor in crime and delinquency" (Winters 1997, p. 452). High school dropouts are more likely to be arrested than high school graduates. Webber (1997) reports that high school dropouts committed 80% of all crimes. Brook and Newcomb (1995) found a link between early childhood aggression and lower academic achievement, their findings "revealed long-term relationships between early childhood aggression and adolescent problem behavior in the academic and occupational areas (p. 395)." The Florida Department of Corrections (2001a) reports that 47.7% of inmates in the State of Florida read at or below the 6th grade level.

The correlations between academic achievement, learning disabilities, social skill deficits and externalizing behaviors are all linked, but the direction of the causal links is difficult to track. It appears that many factors are bi-directional. Benner, Nelson and

Epstein (2002) report a link between academic skill deficits, particularly in language and reading, and persons identified with emotional and behavioral disorders. These researchers found that the overall mean prevalence rate of language deficits in children identified with EBD was 69%. They also reported that, over time, the comorbidity rate between antisocial behavior and language remained stable.

Cognitive and affective variables, as assessed within the framework of emotional intelligence, may be related to academic achievement. Those who perform poorly in school may be more likely to have fewer employment opportunities increasing the likelihood of criminal activity.

Children with difficulties in language may be particularly at risk for anti-social behaviors. Kravetz, Faust, Lipshitz and Shalhav (1999) report deficits in language skills may result in poor verbal and non-verbal communication. These language deficits could be significant in the inability to establish positive social interactions with peers.

Ethnicity and Emotional Intelligence

In contrast to the general population, African-Americans make up a large percentage of the prison population. Data from the 2000-2001 Florida Department of Corrections Annual Report (Florida Department of Corrections 2001a) lists the percentage of black inmates at 54.0% and whites at 43.5% as of June 30, 2001. African-Americans are 43.6% more likely to reoffend than those in other groups (Florida Department of Corrections 2001a). In studies to date, there seems to be little difference in overall scores on the MSCEIT between ethnic groups, but there are differences between sub-scores. These sub-scores may give more information regarding the emotional skills needed for successful re-entry. Other ethnic groups represent 2.6% of

Florida's offender population. Because of the small percentage of other ethnic groups, this study will focus on the differences between the two major populations: black and white.

Collins and Nowicki (2001) suggest that African-American children are "not as adept as their European American peers in identifying emotion conveyed by European American adults' facial expressions and tones of voice and European American children's facial expressions" (p. 336). Social competence may be related to the ability to read facial expressions and vocal tone.

The MSCEIT is a relatively new test and there is currently not enough data to make assumptions about differences between ethnicity and emotional intelligence. In early studies, according to Mayer, Salovey and Caruso (1999), there are no ethnic differences for the total score, but there are some differences in branch scores, such as "whites and blacks outperformed Asians on Branch 3" (p. 76). The authors, however, note that some of the Asians were not native English speakers and the differences could be due to language difficulties. In overall scores, there was no significant difference between ethnic groups.

Gender and Emotional Intelligence

The differences in the way men and women perceive emotional events have long been the topic of comedy, books, movies and popular psychology. The stereotypical female is more emotional than the stereotypical man, yet men represent an overwhelmingly large percentage of the inmate population at 94.1% (Florida Department of Corrections 2001a). Adding to the confusion with gender, are the variations of possible definitions of gender. Whissell (1996) cites Hoyenga and Hoyenga in listing

eight possible definitions of gender: chromosomal, gonadal, hormonal, internal sex organs, external sex organs, rearing style, gender identity and social role. For the purposes of this study, it will be presumed that offenders in male institutions are male and offenders in female institutions are female. Current statistics on the MSCEIT shows significant gender differences with women outperforming men on the assessment of emotional intelligence (Mayer et al. 1999). This was true for the total score of EIQ as well as branch and area scores. In self-report assessments, it may be possible for men to report the emotional behaviors they feel they should have, rather than those they have, but the MSCEIT involves abstract concepts and it should filter out many of the attempts to manipulate the responses. The Florida Department of Corrections (Florida Department of Corrections 2001a) reports that male offenders are 24.2% more likely to reoffend than females.

Emotional Intelligence and Previous Incarcerations

This study will investigate correlations between previous incarcerations and emotional intelligence. It is possible that those who continue to return to prison lack the emotional and social skills to participate effectively in society. Prior reoffenders are 58.1% more likely to reoffend (Florida Department of Corrections 2001b).

Summary

This review of literature presented research to support the problem statement as well as the research questions of this study. This chapter provided an overview of the history and evolution of the concepts of emotional intelligence separately, as well as various implications on theories of emotion and intelligence separately. The purpose of this study is to examine the relationships between various demographic variables in

Florida's offender population and emotional intelligence. These demographic factors include eligibility for special education services, gender, age, age at initial incarceration, type of crime(s), academic functioning (scores on the Test of Adult Basic Education), number of incarcerations, the number of disciplinary reports received during incarceration, and ethnicity. An explanation of the research questions followed the background information related to emotional intelligence, population variables, and related areas. Chapter 3 describes the research methodology employed in this study.

CHAPTER 3 METHODOLOGY

The purpose of this study is to examine the relationships in Florida's offender population between scores of emotional intelligence, as assessed by the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) and various demographic factors within this population. These demographic factors include eligibility for special education services, gender, age, age at initial incarceration, type of crime(s), academic functioning (based on the Test of Adult Basic Education), number of incarcerations, the number of disciplinary reports received during incarceration, and ethnicity.

Although there are several theories and ideas about emotional intelligence, the model for this study is the theory developed by Mayer and Salovey (1997). The definition of emotional intelligence in this framework is:

Emotional intelligence involves the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth. (p. 10)

Population and Sample

The Florida Department of Corrections is responsible for the care, custody and control of approximately 72,000 inmates (Florida Department of Corrections 2001a). Blacks represented the largest racial group of the prison population during this time period, representing 54% of the prison population followed by whites at 43.5% and others at 2.6%. Males were over-represented at 94.1% of this population. Individuals committing violent crimes represent 54.4% of the prison population, property crimes

21.5%, and drug crimes 17.9%. The remaining 6.2% of this population were committed for traffic incidents, escapes, driving under the influence and other miscellaneous crimes. The largest age group of prisoners at the end of the Fiscal Year 2001 was 35 to 39 (17.3%), followed by ages 30 to 34 (16.8%) and ages 25 to 29 (16.1%). The age of persons in adult prisons as of June 30, 2001 was from 14 to 89 years old. As of June 30, 2001 there were 395 inmates who were 17 or younger. Approximately 15% of the prison population receives mental health services.

The Department of Corrections groups education levels into three categories: beginning/basic literacy (1.0 – 4.9); functional literacy (5.0 – 8.9); and GED preparatory literacy skills or better (9.0 and up). The Test of Adult Basic Education (TABE) is used to determine grade level equivalents. As of June 30, 2001, 25.7% of the prison population scored in the beginning/basic literacy range, 37.0% in functional literacy and 37.3% were in the GED preparatory category; 62.7% of the inmate population scored below a ninth grade level on the TABE.

A random sample of 1,000 was obtained from the Department of Corrections, Bureau of Research and Data Analysis, Tallahassee, Florida. The sample consisted of a random selection of 150 inmates at five central Florida institutions housing male inmates. A random selection of 250 inmates was obtained from an institution housing female inmates in this same area. In addition to the random sample, all inmates receiving special education services were asked to participate in this study. As of June 30, 2001, the total prison population at these institutions was 5,008. In addition to the random sample, all special education inmates in each of these institutions were asked to participate. As of June 30, 2001, there were 1,493 offenders who qualified for special education services

throughout the Department of Corrections. Of that group, 643 were identified as having specific learning disabilities (SLD), 206 were identified as serious emotional disturbance (SED), 446 were identified as emotionally handicapped (EH), 3 were hearing impaired (HI), 37 had speech impairments (SP), 154 were educable mentally handicapped (EMH), 3 were trainable mentally handicapped (TMH); and one physically impaired (PI). It is likely that many in the prison population were once eligible for special education services or could have been eligible for services. Eligibility for special education services ends at age 22, and only inmates who have not reached their 22nd birthday are screened for special education eligibility.

Instrumentation

The MSCEIT 2.0

The instrument used in this study to assess Mayer and Salovey's theory of emotional intelligence is the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). "The MSCEIT is an ability measure of emotional intelligence designed to yield an overall emotional intelligence score, as well as subscale scores for perception, facilitation, understanding, and management" (Mayer, Caruso, & Salovey 2000, p. 329). The MSCEIT yields 17 scores, including 2 validity scales, 7 emotional IQ scores, and 9 diagnostic scores" (Mayer, Salovey & Caruso 1999, p. 41). "The MSCEIT is designed to measure one overall emotional intelligence score, two 'area' scores, and four branch scores. Each branch score, in turn, is made up of two individual tasks" (p. 27). The four branch scores are:

Emotional perception. This component of the MSCEIT measures the ability to identify emotions in faces and stories. Respondents are asked to look at a picture of a

face or landscape and determine levels of emotion, such as happiness, sadness, fear, using a five-point scale.

Emotional facilitation of thought. This component measures the ability to use emotional information in cognitive thought.

Understanding emotion. The ability to interpret, reflect, understand and develop meaning from emotional information.

Managing emotion. This section measures the ability to utilize emotional information in judgment, decision-making and personal growth.

There are 141 items on the test. The MSCEIT is an untimed test, but should be taken in one session. The recommended time for the test is 45 minutes. The test may be administered individually or in groups (Mayer, Caruso & Salovey 1999).

Reliability of the MSCEIT

The scores on the MSCEIT are considered highly reliable for both the overall EIQ and the branch scores. The coefficient alpha reliability for the overall and branch scores reported in the MSCEIT Test Manual are found in Table 1 (Mayer, Salovey, & Caruso 1999, p. 78).

Validity of the MSCEIT

The MSCEIT is designed to measure emotional intelligence within the framework of the definition of emotional intelligence theorized by Mayer and Salovey (1997). Within this framework, the MSCEIT has good face validity (Mayer et al. 1999) and content validity is considered a good representation of the Mayer and Salovey model.

Table 2-1 MSCEIT Reliability

Scale group	Scale	Coefficient alpha reliability	N
Overall	Overall EIQ	.90	945
Branch scores	Perception	.87	1211
	Facilitation	.76	1500
	Understanding	.73	1561
	Management	.82	1334

The predictive validity of the MSCEIT shows a moderate correlation between emotional intelligence (EI) and general intelligence. There are also significant correlations between the MSCEIT and social behavior and workplace performance.

Structural validity of the MSCEIT measures the four branches of emotional intelligence, matching the theory proposed by Mayer and Salovey (1997). Most tests of intelligence use a factor analysis. The authors used factor analyses and the results yielded “a first, unrotated, factor on which all the tasks loaded above $r = .10$, and usually at fairly high levels between $r = .30$ -.80. This indicates a general factor of emotional intelligence, or g_{ei} ” (Mayer et al. 1999, p. 88).

Construct validity takes time and the MSCEIT is a relatively new test. Time will tell if the construct validity increases or diminishes over a period of years of testing. Current correlations with sample groups for standardization of the MSCEIT do not include offenders.

Test of Adult Basic Education

One of the relationships examined in this study is the relationship between emotional intelligence, as measured by the MSCEIT, and academic functioning as measured by the Test of Adult Basic Education (TABE). The TABE survey, a shorter version of the full-scale TABE, is administered to all persons entering the Florida Department of Corrections for the purpose of determining the academic needs and eligibility for program services of each inmate pursuant to Department of Corrections Procedures 501.102. Once an inmate is assigned to an educational program, he or she will take the full battery TABE within six weeks of enrollment. TABE tests are administered periodically to determine academic progress and eligibility for vocational programs, GED testing and participation in other Department of Corrections programs. TABE scores will be obtained from the Department of Corrections and used only for the purposes of this research. The scores obtained will be attached to an identification number known only to the researcher to ensure confidentiality of sensitive and protected information.

There are five test levels of the TABE, corresponding to overlapping grade equivalencies, as follows: Literacy (L), grade equivalency 0–1.9; Easy (E), grade equivalency 1.6–3.9; Medium (M), 3.6–6.9; Difficult (D), 6.6–8.9; and Advanced (A), 8.6–12.9. The TABE consists of subtests in the areas of reading, mathematics computation, applied mathematics, language and spelling. The TABE is a timed test. The complete battery consists of 200 items with a total working time of 164 minutes (CTB/McGraw-Hill 1996). The Department of Corrections uses a grade equivalent from

the TABE for the purposes of eligibility for participation in vocational programs and for placement and GED eligibility in academic programs.

For the purposes of this study, academic functioning will be determined by obtaining scale scores on the Test of Adult Basic Education for all participants.

Reliability of the TABE

The Kuder-Richardson Formula 20 (KR20) was used to measure the internal consistence reliability of the TABE, version 7 and 8. The reliability for the measures is separated for three populations, Adult Basic Education, Vocational/Technical and Adult/Juvenile Offender. For the purposes of this study, the KR20 for Adult/Juvenile offenders will be used. The KR20 reliability data for the TABE 7 & 8 for the Adult/Juvenile Offender are shown in Table 2-2 and 2-3:

The Department of Corrections enters the grade equivalent score on the Corrections Database Center (CDC), but for the purposes of this research the grade equivalent score will be converted to a scale score using the conversion chart in the TABE Norms Book, version 7 & 8. The scale score of the TABE will be used rather than the grade equivalent as a variable in this study. CTB/McGraw Hill (1996), the publisher of the TABE, advises using caution with grade equivalency scores, as equivalent scores were not identified particularly for this test.

Validity of the TABE

Content validity of the TABE refers to how well the test reflects and matches the educational goals and knowledge of current curriculum. The developers of the test used educational experts in the field of adult education to ensure content validity of the TABE at the onset and throughout test development.

Table 2-2 Test of Adult Basic Education 7 (TABE 7) KR20 reliability

Test	Level	Subject Area	KR20
TABE 7	E	Reading	.95
		Mathematics Computation	.92
		Applied Mathematics	.94
		Language	.93
		Spelling	.88
TABE 7	M	Reading	.95
		Mathematics Computation	.89
		Applied Mathematics	.93
		Language	.92
		Spelling	.84
TABE 7	D	Reading	.93
		Mathematics Computation	.85
		Applied Mathematics	.88
		Language	.90
		Spelling	.81
TABE 7	A	Reading	.89
		Mathematics Computation	.79
		Applied Mathematics	.83
		Language	.87
		Spelling	.75

Table 2-3 Test of Adult Basic Education 8 (TABE 8) KR20 reliability

Test	Level	Subject Area	KR20
TABE 8	E	Reading	.95
		Mathematics Computation	.93
		Applied Mathematics	.95
		Language	.94
		Spelling	.86
TABE 8	M	Reading	.95
		Mathematics Computation	.91
		Applied Mathematics	.93
		Language	.94
		Spelling	.85
TABE 8	D	Reading	.93
		Mathematics Computation	.86
		Applied Mathematics	.90
		Language	.92
		Spelling	.82
TABE 8	A	Reading	.88
		Mathematics Computation	.82
		Applied Mathematics	.85
		Language	.85
		Spelling	.80

Construct validity refers to how well the test actually reflects the instructional objectives. The TABE reflects the skills and abilities from adult education curriculum

and the scores provide information that can be used to assess academic achievement within the curricula frameworks.

Variables

This study will examine relationships between emotional intelligence, as assessed by the MSCEIT, and variables or factors within the inmate population in the State of Florida. Specifically, this study will look at the relationship between emotional intelligence and the following variables:

1. Type of crime. Whether or not the crime was a violent crime or property crime. This is a categorical variable. For the purposes of this research, a violent crime will be considered a crime committed, or with the intent to commit a physical act or threat upon a person's life or well-being. For the purposes of this study, the Florida Department of Corrections definition of a violent offense will be used:

A crime is defined as violent if it involves actual physical harm or the threat of physical harm to a person, or the crime has a reasonable probability of causing unintended physical harm or physical threat of harm to a person. Crimes are defined as violent from the statutory reference only. Therefore, a judgment has to be made based on this sometimes limited information whether the crime fits the DC definition. For example, if the crime is shooting into a vehicle, it is not known if actual or the threat of physical harm occurred. But in this case we assume there is a reasonable probability that violence could have resulted (Florida Department of Corrections 2002b, p. 18)

2. Special education identification. Information will be accessed through the Correctional Database Center for each research participant, to determine whether or not a participant is, or has been, identified as qualifying for special education services. The type of exceptionality will be entered into the data, e.g., SLD (specific learning disability), EH (emotionally handicapped), etc. Special education identification will be a categorical variable, including the category of "none."

3. Current age. This is a continuous variable. This study will compare scores on the MSCEIT with the age of participants at the time of participating in the research. This variable is on a continuous scale.

4. Age at initial incarceration. This is continuous variable, as the study will compare scores on the MSCEIT as a predictive view of the relationship of scores to an inmate's age at initial incarceration.

5. Academic functioning. Scores on the TABE will be accessed through the Correctional Database Center for each research participant. Grade level scores will be converted to scale scores for this study. TABE scores will be a continuous variable.

6. Ethnicity. Because of the small number of other minority groups incarcerated in Florida, this study will categorize only African-American and white participants. This is a categorical variable.

7. Gender. This is a categorical variable.

8. Number of incarcerations. This is a continuous variable.

9. Number of disciplinary reports. The actual number of disciplinary reports a participant has received during incarceration. This is a continuous variable. For the purposes of this study, the number of disciplinary reports was grouped into three different categories to control for a small number of scores falling outside the normal grouping. The groups were 0-4, 5-9 and 10 and above.

Null Hypotheses

The following hypotheses will be tested in this study:

H1: There is no relationship between emotional intelligence in Florida's inmate population and special education identification.

H2: There is no relationship between emotional intelligence in Florida's inmate population and the type of crime (violent or non-violent) committed by the offender.

H3: There is no relationship between emotional intelligence in Florida's inmate population and academic functioning as assessed by the scale score of the TABE test.

H4: There is no relationship between emotional intelligence in Florida's inmate population and the number of disciplinary reports received during incarceration by participants in this study.

H5: There is no relationship between emotional intelligence in Florida's inmate population and demographic variables, including age, age at initial incarceration, ethnicity, gender and number of incarcerations.

Research Procedures

In order to test the hypotheses of this study, participants will be asked to take the MSCEIT to determine measures of emotional intelligence. All other information used to test the hypotheses will be acquired from the Department of Corrections. This is a correlational design.

Sampling

The Department of Corrections, Bureau of Research and Data Analysis, provided a random sample of 150 inmates at 5 of the 6 target institutions and a random sample of 250 inmates at the sixth, an institution housing female inmates (Appendix C). This provided a random sample of 1,000 inmates. In addition to the random sample, all inmates identified as eligible for special education services were included in the study. This number varies daily, but could include as many as 150 per institution, or as few as 25. The number of special education eligible inmates at the six institutions was 241 at

the time of the data collection. The data collection took two weeks to complete using a schedule for one full day at each of the institutions housing male inmates and two days at the institution housing female inmates. The inmates were on the call-out to report to the Education Department. A call-out is a daily print-out advising inmates of any variations to his or her normal job assignment. Call-outs are used for medical, classification and education purposes. The times will be staggered to provide for small groups. All persons reporting were briefed on the concepts of emotional intelligence and purposes of this study and any risk factors involved. All inmates were told that participation was voluntary and no punishment would be given for non-communication, and no benefits would be given for participation. Each inmate who chose to participate was given two informed consent forms, one approved by the University of Florida (Appendix A) and one approved by the Department of Corrections (Appendix B). Inmates were allowed to ask any questions regarding the study, their participation in the study and the possible uses of the study. They were told the results could be published. Both informed consent forms were read to all inmates who came to the meetings. Those volunteering for participation returned for testing later in the day.

Data Analysis

There were a total of nine variables in this study, including one variable measuring the relationship between emotional intelligence and performance in academic areas as measured by the Test of Adult Basic Education (TABE); and eight variables within the inmate population, including type of crime(s), special education identification, age, age at initial incarceration, ethnicity, gender, number of incarcerations and number of disciplinary reports during incarceration.

The following steps were to analyze the data:

1. Raw data was used to determine descriptive statistics. This involved calculations of the mean and standard deviations of each category.
2. Determine the reliability of the data.
3. Test the hypotheses.

Limitations of the Study

Inmates are very suspicious of any non-inmates. In general, inmates feel they are incarcerated not so much because of a crime, but because the “system” put them there. They are generally reluctant to participate in any non-mandatory activities.

Inmates are reluctant to take tests considered to be psychological in nature.

There is significant movement in the inmate population that cannot be predicted. Additionally, an inmate on the random sample list could go on a medical run, be released from prison, be locked in confinement or simply fail to show.

One of the variables involved in this study was to determine relationships between emotional intelligence and special education identification. Although it is likely many inmates have learning or emotional disabilities, only those who have not reached their 22nd birthday are listed as special education students. Those receiving special education services, particularly those with emotional disabilities, are often in confinement and cannot be removed for research purposes. The number of participants may not be large enough to develop a reliable sample to predict generalizability.

Summary

The purpose of this study was to examine the relationships in Florida’s offender population between scores of emotional intelligence and various factors within this

population. These demographic factors included type of crime(s), eligibility for special education services, age, age at initial incarceration, academic functioning (based on the Test of Adult Basic Education), ethnicity, gender, number of incarcerations, and the number of disciplinary reports received during incarceration.

In order to test the nine hypotheses in this research, a random sample of 1,000 inmates from six correctional institutions were asked to participate in this research. In addition to the random sample, all offenders eligible for special education services in the six participating institutions were included in the sample group. Descriptive statistics were included for all variables. For Hypotheses 1, 3 and 5, an analysis of variance was used. For Hypothesis 2, a logistic regression was used. For Hypothesis 4, a regression equation was used.

Chapter 4 presents the results and data analysis of this study. Chapter 5 discusses conclusions and recommendations for further research.

CHAPTER 4

RESULTS AND ANALYSIS OF DATA

This chapter presents the results of the data collected for this study. The purpose of this study was to examine the relationships in Florida's offender population between scores of emotional intelligence, as assessed by the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) and various demographic factors within this population. The demographic factors included: type of crime(s); eligibility for special education services; age; age at initial incarceration, academic functioning (scale scores on the Test of Adult Basic Education); ethnicity; gender; number of incarcerations; and the number of disciplinary reports received during incarceration.

A random sample of inmates in the five facilities housing male inmates and one facility housing female inmates in North Central Florida used in this study was obtained from the Department of Corrections, Research and Data Collections office. The Department of Corrections uses SAS software to generate random samples. The random sample was stratified by facility (Appendix C). The random sample group from the institutions housing male inmates included 150 at each institution and the sample size from the prison housing female inmates included 250. The larger random sample at the female prison was due to the small number of institutions housing female inmates. In addition to the random sample, all inmates at the target institutions identified as receiving special education services were asked to participate in this study. One thousand inmates were included in the random sample and 241 inmates identified as receiving special

education services were added to, if they were not already included in, the random sample.

The selected inmates were on a call-out to report to a meeting room in each facility. In the Florida Department of Corrections, a call-out is a daily list of inmates who are to report to areas other than their job assignments. An example would be those who are called to Medical for appointments or those who are called to Education for testing. At each institution, the inmates were brought in as a group and the researcher explained the purpose of the study, the potential risks and what was being asked of the participants. Each inmate was given two consent forms, one approved by the University of Florida as part of the Institutional Review Board Process and another consent form that is required by the Florida Department of Corrections. The contents of both forms were read and explained to the inmates at each facility. Questions were received and the inmates were then asked whether or not they chose to participate. Those who chose not to participate were released to their daily activities. The testing directions and questions were read aloud at each testing. No additional assistance was given. The completed answer sheets were sent to Multi-Health Systems, the publishers of the MSCEIT, for scoring.

There were 317 inmates who chose to participate in the study. The researcher removed 12 answer sheets from participants who did not fall within the two ethnic groups used in this study. Five inmates changed their minds and left before completing the test. Three hundred answer sheets were sent for scoring to Multi-Health Systems, the publishers of the MSCEIT. Multi-Health Systems could not scan 26 answer sheets either due to incorrect markings or the answer sheets were damaged and could not be read by the scanner. The number of returned scores was 284. During the data analysis, cases

were removed in listwise deletion when there was missing data for that particular analysis.

Emotional intelligence was determined by using the SS_TOT, which is the score representing total overall emotional intelligence. The overall emotional intelligence score includes the four branches of emotional intelligence: “(1) the ability to perceive emotions, (2) the ability to access, generate, and use emotions so as to assist thought, (3) the ability to understand emotions and emotional knowledge, and (4) the ability to regulate emotions so as to promote emotional and intellectual growth” (Multi-Health Systems 2000, p. 3). The MSCEIT scores are reported as normed standard with a mean of 100 and standard of deviation of 15.

Descriptive Statistics

The descriptive statistics for Hypothesis 1 are found in Table 4-1. This hypothesis states there is no difference between the emotional intelligence scores of inmates who are identified as eligible for special education services and those who are not identified as eligible for special education services.

Table 4-1 The means for emotional intelligence and special education eligibility

Special education eligibility	Mean	Std. Deviation	N
Special Ed	74.07	13.55	53
Non Special Ed	84.91	16.11	194
Total	82.59	16.19	247

The frequency statistics for Hypothesis 2 are listed in Table 4-2. This hypothesis states there is no relationship between the emotional intelligence scores of inmates in the Florida Department of Corrections and the type of crime (violent or non-violent) committed by the offender.

Table 4-2 Type of criminal activity

Type of crime	N	Percentage of sample
Violent	147	56.9
Property	111	43.1
Total	258	100.0

The descriptive statistics for Hypothesis 3 are reported in Table 4-3. This hypothesis states there is no a relationship between emotional intelligence in the inmate population and academic functioning. For the purposes of this research, the scale score on the Test of Adult Basic Education was used to determine academic functioning. Table 4-4 describes the tested literacy skills of those entering the prison system. The Department of Corrections uses a grade level, rather than a scale score.

Table 4-3 Descriptive Statistics –TABE scale scores

	Minimum	Maximum	Mean	Std. deviation	N
TABE scale score	362	672	549.33	57.84	279

The frequency statistics and descriptive statistics for Hypothesis 4 are shown in Table 4-5 and 4-6. Hypothesis 4 states that there is no relationship between emotional intelligence in the inmate population and the number of disciplinary reports received during incarceration by the participants in this study.

Table 4-4 Tested literacy skill levels at admission (grade level equivalency)

	White male	White female	African-American male	African-American female	Others male	Others female
Median TABE score	8.3	8.1	5.7	5.4	6.0	6.3

Note: The grade equivalent is listed as the year and month of academic functioning, e.g. 8.3 would indicate a person is functioning at the 8th grade level, the 3rd month of school. The highest grade level equivalent of the TABE is 12.9.

Table 4-5 Number of disciplinary reports received during incarceration

	Minimum	Maximum	Mean	Std. deviation	N
Disciplinary reports	0	58	4.49	7.51	284

Table 4-6 Descriptive statistics for the number of disciplinary reports

Number of disciplinary reports	Mean	Std. Deviation	N
0-4	82.72	16.57	184
5-9	80.70	16.24	40
10 or above	82.25	14.82	33
Total	82.35	16.26	257

The descriptive statistics for the variables of age and age at initial incarceration in Hypothesis 5 are reported in Table 4-7. The frequency statistics for number of incarcerations are listed in Table 4-8.

Table 4-7 Descriptive statistics for age and age at initial incarceration

	Minimum	Maximum	Mean	Std. deviation	N
Age	17	68	29.15	10.09	284
Age at I.I.	14	68	24.38	8.29	284

Table 4-8 Frequency statistics – Number of incarcerations

Number of incarcerations	Frequency	Percent	Cumulative percent
1	227	79.9	79.9
2	47	16.5	96.5
3	4	1.4	97.9
4	2	.7	98.6
5	4	1.4	100.0

The frequency statistics for ethnicity and gender are found in Table 4-9 and the descriptive statistics for the means of ethnicity and gender are shown on Table 4-10. Hypothesis 5 states that there is no relationship between emotional intelligence in the inmate population and demographic variables, including age, age at initial incarceration, ethnicity, and gender.

Table 4-9 Frequency statistics for gender and ethnicity

	Frequency	Percent
Gender1 (male)	198	69.7
Gender 2 (female)	86	30.3
Ethnicity 1 (White)	164	59.9
Ethnicity 2 (African-American)	110	40.1

Table 4-10 MSCEIT – Mean scores in the prison population by ethnicity and gender

Ethnicity	Gender	Mean	Std. deviation	N
White	male	83.50	15.94	100
	female	91.74	15.66	52
African-American	male	77.57	14.73	75
	female	73.03	11.80	20

Research Hypotheses Analysis

To test the research questions, the following hypotheses were developed:

1. There is no relationship between emotional intelligence in Florida's inmate population and special education identification.

Results of the analysis of variance between groups test results are presented in Table 4-11. The significance level of .07 indicates there is no significant difference, $p < .05$, between the emotional intelligence of inmates who are not eligible for special education services and inmates who are eligible for special education services. There is a difference between the mean of the two populations, but the difference is not statistically significant.

✕ 2. There is no relationship between emotional intelligence in Florida's inmate population and the type of crime (violent or property) committed by the offender.

A logistic regression analysis was used to determine if there was a significant relationship between emotional intelligence and the type of crime (violent or property)

committed. The score of emotional intelligence was used as a continuous dependent variable in this model. The independent variable was the type of crime committed by the participants of this study. For the purposes of this study, the two types of crime were violent and non-violent (property) crimes. Results of the regression analysis are presented in Table 4-.12. The relationship between emotional intelligence and the type of crime committed is not significant, .09, $p < .05$.

Table 4-11 Analysis of variance using emotional intelligence scores as the dependent variable

Parameter	B	Std. Error	T	Sig.
Intercept	35.63	7.63	4.67	.00
TABE	.07	.01	6.38	.00 *
Age	.03	.17	-.15	.88
Age-initial incarceration	.11	.21	.55	.58
Number of incarcerations	-.39	1.64	-.19	.85
Whites	15.47	3.64	4.25	.00 *
African-Americans	0*	.	.	.
Males	6.76	3.62	1.87	.06
Females	0	.	.	.
Special Education	-6.30	3.41	-1.84	.07
Interaction-White males-African American males	-10.82	4.37	-2.48	.01 *
Interaction - White females - African-American females	0			
Interaction Special Education identification and ethnicity	-1.97	4.49	-.44	.66

* $p < .05$, $N = 258$

3. There is no relationship between emotional intelligence in Florida's inmate population and academic functioning as assessed by the scale score of the TABE test.

Table 4-12 Summary of logical regression equation for emotional intelligence predicting type of crime

Variable	B	df	Sig.
Emotional intelligence	.01	1	.09
Constant (type of crime)	.82	1	.21

$p < .05$, $N = 258$

Results of the analysis of variance between group tests results are presented in Table 4-11. A significant relationship, ($.00$; $p < .05$), was shown between emotional intelligence and academic functioning as assessed by the TABE.

✕ 4. There is no relationship between emotional intelligence in Florida's inmate population and the number of disciplinary reports received during incarceration by participants in this study. The results of the regression analysis are reported in table 4-13.

Table 4-13 Regression analysis – The relationship of disciplinary reports using emotional intelligence as the dependent variable

Parameter	B	Std. error	t	Sig.
Intercept	82.24	2.83	28.97	.00
0-4 Disciplinary reports	.47	3.08	.16	.88
4-9 Disciplinary reports	-1.55	3.84	-.40	.69
10 and above disciplinary reports	0			

$p < .05$, $N = 257$

A regression analysis was used to determine the relationship between emotional intelligence of Florida's inmate population and the number of disciplinary reports received during incarceration. The number of disciplinary reports were grouped into three categories, those receiving 0-4 disciplinary reports, those receiving 5-9 and those receiving 10 or more. The results of this analysis are shown on Table 4-13, The dependent variable used in the regression analysis was emotional intelligence. The analysis revealed no significant relationship ($.88$; $p < .05$) between emotional intelligence and the number of disciplinary reports received during incarceration.

5. There is no relationship between emotional intelligence in Florida's inmate population and demographic variables, including age, age at initial incarceration, ethnicity, gender and number of incarcerations.

An analysis of variance was used to determine the relationship between emotional intelligence and various demographic variables within Florida's inmate population. The independent variable was the score of emotional intelligence. The results of the analysis of variance between groups is shown on Table 4-11.

No significant relationship between age and emotional intelligence (.88; $p < .05$) in the inmate population was found.

There was no significant relationship found between age at initial incarceration and emotional intelligence (.58; $p < .05$).

A significant relationship between emotional intelligence and ethnicity (.00; $p < .05$) was found to exist between African-Americans and Whites in this study.

No significant relationship was found in the emotional intelligence between males and females (.06; $p < .05$).

The relationship between emotional intelligence and the number of incarcerations in the inmate population was not found to be significant (.85; $p < .05$).

An analysis of variance was used to determine the relationship between emotional intelligence and the interaction between ethnicity and gender. Table 4-11 shows that this relationship is significant (.01; $p < .05$).

An analysis of variance (see Table 4-11) was used to determine the relationship between emotional intelligence and the interaction between ethnicity and special education eligibility. This relationship was not found to be significant (.66; $p < .05$).

No analysis was used to determine the relationship between emotional intelligence and the interaction between gender and special education identification, as an insufficient number of incarcerated females were identified as eligible for special education services. As of August 31, 2003, Brainard (2003) identified only 47 female inmates in the State of Florida Department of Corrections as eligible for special education services. Only eight female inmates eligible for special education services were located at the institution housing female inmates used in this study. Only 3 of the 8 volunteered for participation in this study, making the sample too small to determine any meaningful interaction.

Summary of Findings

Findings in the Descriptive Data

The mean score of emotional intelligence of the inmate population participating in this study is 84.91. The MSCEIT has a normed standard mean of 100, with a standard deviation of 15. The inmates participating in this study scored slightly below one standard deviation below the norm. The special education population in this study had a mean of 74.07, well below the norm standard mean of 100. Although there is no significant difference between the two groups within this study, the mean scores of both groups fall one standard deviation below the normed mean of 100 as illustrated in Table 4-14.

African-Americans represent 53.3% of Florida's inmate population, and whites represent 44.0% of Florida's inmate population (FDC 2002b, p. 20). The percentages for participants in this study were 40.1% African-American and 59.9% White.

Females were over-represented in this study when compared to Florida's inmate population. Females represent only 5.96% of Florida's inmate population, but

represented 72 of the 247 (29.1%) participants in this study, or 29.1%. Of the 72 female participants in this study, 20 were African-Americans and 52 were whites.

Table 4-14 Overall emotional intelligence score – Mean score comparison

		Cornell, 2003	MSCEIT, Normative Data
Ethnicity	African-American	76.62	99.10
	White	86.32	101.56
Gender	Male	80.96	95.44
	Female	86.54	103.79

Standard Deviation=15

Males represented 175 of the 247 (70.9%) in the sample population. Of the 175 males who participated in this study, 75 were African-Americans and 100 were whites.

Although 241 inmates identified in the sample population were eligible for special education services, only 53 chose to participate in this study. Of the 247 inmate participants (some participants were removed in listwise deletion), 21.5% were identified as eligible for special education services. The average age at incarceration of those participating in this study was 24.38. Eligibility for special education services ends at age 22, thus no special education screening is done on those over age 22. It is likely that many more inmates have academic and behavioral disabilities, but would not show in the Florida Department of Corrections database if they were older than 22 at initial intake. According to the Department of Juvenile Justice (Department of Education, Juvenile Justice, 2000) “more than one in three youths who enter correctional facilities have previously received special education services” (p. 1).

Summary

An analysis of the data determined that a significant relationship existed between emotional intelligence and three demographic variables; academic functioning, ethnicity

(only African-Americans and whites were examined), and the interaction of ethnicity and gender. All other demographic variables were found to have no significant relationship with emotional intelligence.

Chapter 5 provides a summary, discussion of results and recommendations of this study.

CHAPTER 5

CONCLUSIONS, RECOMMENDATIONS AND IMPLICATIONS

Traditionally, educators have used standard intelligence tests to determine the intelligence of their students. Newer research in brain-based theories and concepts of multiple intelligences (Gardner, 1983) may provide additional resources in understanding at-risk students and those who have failed in school and in society. In order to provide leaders in alternative educational settings more research based knowledge, newer theories should be researched, including the relationships between emotion and behavior. Mayer, Salovey and Caruso (1999) developed an ability-based test to determine emotional intelligence. Named for its authors, the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) provides an overall emotional intelligence quotient that involves four branches of emotional intelligence: (a) perception of emotional information; (b) the ability to access, generate and use emotions to assist thought; (c) ability to understand emotions and emotional knowledge; and (d) the ability to regulate emotions so as to promote emotional and intellectual growth.

Similar to traditional intelligence tests, the MSCEIT scores are “reported as normed standard with a Mean = 100, and a Standard Deviation = 15. Scores below 85 indicate that emotional intelligence needs development” (Multi-Health Systems 2000, p. 3). The problem addressed in this study was to determine additional factors related to social and emotional skills necessary for post-release success. Education of offenders is a factor in their post-release success, reducing recidivism. Educational and vocational skills are not enough, however, as the recidivism rate of released offenders continues to

increase. The rising cost to persons and property, in addition to the high costs of incarceration, necessitates the further study of other factors that may relate to the success of released offenders. Many offenders lack the social and emotional skills to help them in social and work relationships. New theories of emotional intelligence and ways of assessing emotional intelligence could provide a framework in determining another factor related to post-release success of offenders.

The purpose of this study was to examine the relationships in Florida's offender population between scores of emotional intelligence, as assessed by the MSCEIT and various demographic factors within this population. These demographic factors include type of crime(s), eligibility for special education services, age, age at initial incarceration, academic functioning (based on the scale scores of the Test of Adult Basic Education), ethnicity, gender, number of incarcerations, and the number of disciplinary reports received during incarceration.

As might be expected, the mean scores of the inmate population were well below the standard score of 100. The concept of emotional intelligence is relatively recent and thus does not have a huge research knowledge base, but it is likely that emotional intelligence has links with research in the areas of both emotion and intelligence.

Five hypotheses were developed to determine the relationship between emotional intelligence and nine variables within the inmate population. An analysis of variance was used to determine the relationship between emotional intelligence and academic functioning, age, age at initial incarceration, ethnicity, gender and special education identification. A logistic regression was used to determine the relationship between emotional intelligence and the type of crime committed, using violent and non-violent as

the two types of crimes. An analysis of variance was used to determine the relationship between emotional intelligence and the number of disciplinary reports received during incarceration.

Summary and Discussion of Results

The results of this study can contribute to the fields of educational leadership, particularly those who work with students in special education, correctional education and Department of Juvenile Justice programs. The data collected and analyzed in this study provided comparisons between emotional intelligence and various factors in the offender population. The information will also add to the research of Mayer, Salovey and Caruso (1999, 2000a, 2000b) and others who continue to study the relatively new, but expanding field of study in emotional intelligence and the potential benefits and knowledge in learning more about how emotion affects human behavior. Due to the security concerns, little research done within the prison population. The focus of prison education is the link to recidivism. Studies into the underlying causes of criminal behavior will contribute to this field of knowledge.

Descriptive Data Results

The descriptive data showed the inmate population mean score of emotional intelligence, (82.59) is more than one standard deviation from the average norm standard of 100. The mean score of emotional intelligence in the special education population in the Department of Corrections is 74.01. The mean score of males participating in this study was 80.96, compared with females with a mean of 86.54. Whites, both males (83.50) and females (91.74) scored higher than blacks. Black males scored a mean of 77.57 and black females scored a mean of 73.03. The average age of those participating in this study was 24.38.

Hypothesis Analysis Results

Research Question 1: There is no relationship between emotional intelligence in Florida's inmate population and special education identification.

The mean for the overall special education population was 75.07, more than one standard deviation below the normed standard of 100. Although the research in this study showed no significant differences between those participants who were eligible for special education services, the mean when compared to the normed standard is notable. Special education eligibility was determined by using the Florida Department of Corrections database. As inmates are screened for special education services only if they have not yet reached their 22nd birthday, it is likely that many more inmates may have learning or emotional disabilities than are displayed on the database. Doren (1996) cited research from The National Longitudinal Study reporting that nearly 50% of incarcerated youth have a learning or behavioral disability.

In various studies (Miller-Johnson et al, 1999, Marcus & Cramer 2001, Farmer et al and Wehby 1994), it has been reported that deficits in social and emotional functioning increase the likelihood of delinquent and criminal behavior. The mean score of emotional intelligence for the inmate population and in particular the low score of the special education population in this research would support the relationship between emotional difficulties and anti-social behavior.

Research Question 2. There is no relationship between emotional intelligence in Florida's inmate population and the type of crime (violent or property) committed by the offender.

Miller and Johnson et al. (1999) found that children who respond aggressively in social situations have difficulty recognizing strong emotions in others. They tend to

overestimate their social competence and are less aware of how others view them. This researcher expected a correlation between scores of emotional intelligence and violent behavior, but analysis of the data did not show a significant relationship. In an e-mail communication with Dr. Mayer (J. D. Mayer, personal communication, October 16, 2003), one of the authors of the MSCEIT, suggested that a stronger relationship may appear if the level of violence were scaled, rather than just a "1/0 dichotomy" and further recommended a social psychology violence ratings scale. This may be an area for further investigation in other research studies. Dr. Mayer also suggested that breakdowns between gender and violent behavior could produce different results.

Research Question 3. There is no relationship between emotional intelligence in Florida's inmate population and academic functioning as assessed by the scale score of the TABE test.

This research showed a significant relationship between academic functioning and emotional intelligence, with a .00 level of significance. There should be some correlation with academic functioning and emotional intelligence simply because the MSCEIT is an ability test and a participant would need some academic skill to take the test. Although the test was read to all participants, it is unlikely that those with lower language skills would understand some of the vocabulary in the test. Words like "enlivened" and "subordinate" are probably unfamiliar to those with lower language skills.

These findings support research by Winters (1997) who found that "poor academic achievement is a major factor in crime and delinquency (p. 452)" and Brooke and Newcomb (1995) who found a link between early childhood aggression and lower

academic achievement. Benner et al. (2000) found language difficulties are prevalent in children identified with emotional behavioral disorders. Kravetz et al. (1999) reported deficits in language skills may result in poor verbal and non-verbal communication. These language deficits could be significant in the inability to establish positive social interactions with peers. It would be difficult to achieve high scores on the MSCEIT if one were unable to think abstractly. Some questions ask for a description of a feeling in association with colors, tastes or temperature. It would be difficult for concrete thinkers to imagine those sensations connected with feelings.

Perhaps in the future, a measurement of emotional intelligence will be developed that is less dependent on understanding the language of the test. This would allow assessment of emotional intelligence for younger age groups and for those with learning and emotional disabilities.

Research question 4. There is no relationship between emotional intelligence in Florida's inmate population and the number of disciplinary reports received during incarceration.

The data analysis showed no relationship between the number of disciplinary reports received and emotional intelligence. This researcher expected that the more disciplinary reports received, the lower the emotional intelligence, but that did not prove to be true. When the initial data proved no difference, the disciplinary reports were split into three groups, 0 – 4, 5 – 9 and 10 and above. Still no significant relationship between disciplinary reports and emotional intelligence was found. In this study, 87.7% of the participants had 10 or less disciplinary reports. The small number of participants who had 10 or more disciplinary reports may be a factor in not finding a significant

relationship. It is also possible that those who frequently receive disciplinary actions were in confinement and unavailable to test, or may not volunteer for research studies. As the number of disciplinary reports received during incarceration affects the rate of recidivism (FDC, 2001b), this would be an area of interest for further research.

Research question 5. There is no relationship between emotional intelligence and demographic variables including age, age at initial incarceration, ethnicity, gender and number of incarcerations.

This researcher expected there would be a significant relationship between age and emotional intelligence. In the MSCEIT norm data a significant difference $r = .03$, $p > .05$ was shown between emotional intelligence and age (Mayer, Salovey & Caruso, 1999).

The U. S. Department of Justice (1997) reports "age at first adult arrest and recidivism were related regardless of number of prior arrests" (p. 8). It was hypothesized that there would be a significant relationship between the age of initial incarceration and emotional intelligence, but the relationship did not prove significant.

In this study, there was a significant difference (.00) between the emotional intelligence scores of whites and African-Americans. As African-Americans enter the prison system with lower TABE scores than whites, the differences may be attributable more to academic functioning than to ethnicity. African-American females enter prison with the lowest grade level equivalency (5.4), followed by African-American males (5.7), white females (8.1) and white males at (8.3). Further studies may investigate emotional intelligence and the differences found in various cultures. Collins and Nowicke (2001) found that African-American children were "not as adept as their European American

peers in identifying emotion conveyed by European American adults” (p. 336). Future research might focus on whether ethnicity is impacted by cultural perceptions and academic functioning within this population.

Gender showed no significant relationship to emotional intelligence. There were mean differences between the emotional intelligence of females (86.54) and males (80.96). There were, however, significant differences in the interaction between ethnicity and gender. A surprising finding was the mean differences between white females (91.74) compared to white males (83.50), African-American males (77.57) and African-American females (73.03).

Those who have previous incarcerations are 58.1% more likely to reoffend (FDC, 2001b). It was expected that as social and emotional skills are necessary to function in society, reoffenders would have lower scores of emotional intelligence. This was not the case. The majority (79.9%) of those participating in this study had no previous incarcerations. It is possible that the low number of reoffenders who participated in this study reduced the power of this relationship.

Although this study included mean score comparisons using gender and ethnicity to normative data, normative data was not available comparing special education status, interaction of gender and ethnicity, and other variables specific to the prison environment.

The participants in this study had lower scores of emotional intelligence than those in the norm data for the MSCEIT. African-Americans scored less than whites in this study. The MSCEIT norm data (1999) does not provide a breakdown of gender within ethnic groups and thus no comparison could be made with this research.

The lower scores of African-American females may be due, in part, to the small number ($n=20$) of participants in this group. It is also likely that there is no significant difference after adjusting for the TABE scores.

The majority of those included in the MSCEIT norm data had at least some college courses. Participants in this study were not asked to self-report their highest education level. The scale score of the Test of Adult Basic Education (TABE) determined academic functioning. The mean for this research population was 542.31. This mean would convert to a grade level equivalent of approximately 7.3 (CTB-McGraw-Hill 1995).

Although 2.5% of the participants in this study were eligible for special education services, it is likely many more were eligible at some time. Only inmates entering the institution prior to their 22nd birthday are screened for special education services. Some research suggests that as many as "one in three youths who enter correctional facilities have previously received special education services (National Center on Education, Disability and Juvenile Justice 2000, p. 1). If the data could be captured to identify all inmates who had ever been eligible for special education services, it is possible the difference would be greater between the two groups.

Summary

The difficulty in identifying those with exceptionalities may have affected this research in accurately identifying that population. Although mean differences were found in this study between special education eligible and offenders who were not eligible for special education services, no significant differences were found within the inmate population in this research.

As discussed in the limitations, offenders are wary of testing. The original random sample and the addition of special education eligible inmates brought the sample to 1,241, but only 300 chose to participate. Some quit prior to completing the test and some answer sheets were incorrectly filled out or damaged, leaving the number of participants prior to listwise deletion of 284, 198 men and 86 women. Women participated at a higher rate than men. The sample size for females was 267, and 86 chose to participate (32.2%). Of the 1,224 male inmates invited to participate in this study and only 267 chose to participate (21.8%).

Some offenders verbalized their suspicions, offering that it was some sort of psychological test to use against them. Others said they simply were not going to volunteer for anything if they were not receiving a reward. It is a rare opportunity for inmates to have choices. Some may have chosen not to participate just to exercise the freedom of choice.

Also listed as a limitation was the poor academic functioning of the inmate population. Research has shown a moderate correlation between verbal intelligence and emotional intelligence (McCraw 2000).

Recommendations for Future Research

For the purposes of this study, only the overall score of emotional intelligence was used to determine emotional intelligence. The overall TABE battery score was used to determine academic functioning. Benner et al. (2002) found relationships between emotional behavioral disorders and language deficits. Further research may discover similar relationships between emotional intelligence and TABE language scores.

Grouping the samples by academic functioning, type of exceptionality (special education), gender and ethnicity may provide more insight into these populations. The

surprising mean differences between white females and all other groups warrants further investigation. Further research may uncover other factors involved to explain this finding. Emotional disabilities often coincide with poor academic achievement (Rock, Messler, & Church 1997) and poor academic achievement often leads to school failure and poor employment outcomes. More research is required to find relationships between emotional intelligence, special education identification, academic and social functioning and criminal behavior. Doren et al. (1996) found that 37% of high school students identified as seriously emotionally disturbed (SED) were arrested within two years of leaving high school and 20% of those identified with a specific learning disability (SLD) were arrested within two years after leaving high school. Further research into the relationships between emotional intelligence and various factors within the special education population may reveal information for educators and educational leaders in responding to at-risk youth. Additional research may discover links between emotional intelligence and emotional behavioral disorders, particularly children identified as SED. It would be particularly useful to perform a longitudinal study to examine relationships between at-risk youths, emotional intelligence, and criminal behavior. This research study examined the relationship between those who commit violent crimes and those who commit property crimes. Additional research may include a varied definition of violent crime, rather than the limited definition in this study. Mayer and Salovey (1997) clearly emphasize that their theory of emotional intelligence is not "preferred ways of behaving" (p. 8), but this researcher believes the intelligent use of emotional information is related to behavior. Further research on emotional intelligence with adolescents and at-risk children, particularly in the Juvenile Justice system, may provide more information to

determine relationships between those who are at-risk and those who are in the prison population.

The cognitive theory of emotional intelligence emphasizes the fluid nature of emotional intelligence. Although some people may inherently have higher scores of emotional intelligence than others, through a greater understanding of how we use emotional information, emotional intelligence can improve over time. Since 1999, nearly 600,000 offenders have been released each year (Petersilia 2000). Although prison education programs have lowered the rate of recidivism, far too many released offenders recommit and return to prison. As budget cuts have reduced the number of educational and vocational programs for inmates, it is likely the rate of recidivism will continue to grow. Ideally, research in the area of emotional intelligence will assist those working with at-risk children and children with exceptionalities to provide preventative measures at a younger age.

APPENDIX A
UNIVERSITY OF FLORIDA IRB APPROVAL AND INFORMED CONSENT




UNIVERSITY OF
FLORIDA

Institutional Review Board

98A Psychology Bldg.
PO Box 112250
Gainesville, FL 32611-2250
Phone: (352) 392-0433
Fax: (352) 392-9234
Email: irb2@ufl.edu
<http://www.rgp.ufl.edu/irb/irb02>

September 4, 2002

To: Ms. Joy Suzann Hodges Cornell
HC 1 Box 200
Old Town, FL 32680

From: C. Michael Levy 
University of Florida
Institutional Review Board

Subject: Approval of Protocol # 2002-482

Title: The Relationship Between Assessed Emotional Intelligence of Offenders in the Florida
Department of Corrections, Academic Level and Special Education Status

Funding: Graduate Education

I am pleased to inform you that the Board determined at its July 18, 2002 meeting that your research presents no more than minimal risk and voted to approve your protocol conditional upon explicit changes. Those changes have been received and we now issue this approval letter.

Attached is the approved informed consent for you to use with your project. If you wish to make further changes to this protocol, including the number of participants, you must disclose your plans prior to implementing them so that the Board can assess their impact on your protocol. In addition, you must report to the Board any unexpected complications that affect your participants.

This approval is valid until July 18, 2003. If you have not completed this protocol by then, please telephone our office at 392-0433 and we will discuss the renewal process with you. It is important that you keep your Department Chair informed about the status of this research protocol.

CML:d1

Equal Opportunity/Affirmative Action Institution

Informed Consent

The relationship between assessed emotional intelligence of offenders in the Florida Department of Corrections, academic level and special education status

Please read this consent document carefully before you decide to participate in this study.

What is this about?

Some people can do math really well. Some people can write really well. It may be that some people are smart in different ways. Being smart is often believed to be "book smart" as in math, science or language, but being smart may include the ability to understand and use emotions in yourself and other people. That would be "people smart." This study is going to look at the way inmates may be "people smart." If you choose to participate, you will be asked to take a test. This test will try to determine if you are able to see, understand and use emotional information in yourself and in other people. This study will look at the ways inmates differ in "people smart" compared to "free people." There are several questions that this research will hope to answer. The study will look at the "people smart" of these groups of inmates:

- Gender
- Race/ethnicity
- Age at the time of the test
- Age at the time of initial incarceration
- Inmates who committed violent crimes compared to those who committed property crimes
- Those who have learning disabilities or emotional problems
- Comparing scores on this test with the number of disciplinary reports received during incarceration

Being "people smart" often helps people get and keep jobs. Inmates who are released often have difficulty getting jobs and the information from this study might help inmates understand how "people smart" they are and know of areas they may need to improve. If the research shows anything important, maybe the Department of Corrections will look into new programs to help you become more "people smart."

Who am I?

My name is Mrs. Cornell. I am the Education Supervisor at Cross City Correctional Institution. For purposes of information, Education Supervisors have no authority over inmates, other than to ask security to remove them from school if they become disruptive. Classification officers control job assignments. Central Office in Tallahassee controls all gain time and release dates. Your gain time or job assignment will not be affected by your decision to participate or not to participate in this study.

What you will be asked to do?

The test you will take, if you choose to participate, is called the MSCEIT. It sounds like Miss Keet. MSCEIT stands for Mayer-Salovey-Caruso Emotional Intelligence Test. It is named after the people who wrote the test, Dr. Mayer, Dr. Salovey and Dr. Caruso. The test will try to find out if you can see and understand emotions in yourself and others. It will also try to find out if you can use emotions to think about things and make decisions.

How much time will it take?

The test will take about 45 minutes. The answer sheets will be mailed off, graded and returned to the researcher.

What's in it for me? Can participating hurt me?

APPROVED BY
University of Florida
Institutional Review Board (IRB 02)
Protocol # 2002-48
For Use Through 7/18/2003

There are no physical risks in this study. This research has nothing to do with determining whether or not you should be released and cannot change your release date. Although any test of this type has something to do with psychology, in that it tries to determine how you think about things, it is not a test to determine whether or not you have mental problems.

Compensation (What will I get if I participate?)

You will not get any money or benefits for helping with this study. You will get no gain time or special privileges for participating, but will not be punished for non-participation. Your gain time or release date will not be affected either way.

Confidentiality (Who will know how I did on this test?)

After your test scores are combined with the information from the Department of Corrections, your name, DC number or social security number will be removed. Your individual test scores will not be given to the Department of Corrections, although they will be given a copy of the overall research findings. If you choose to participate, the overall information from the test may be published or shared with others, but your name, or any identifying numbers, will not be used in any publication. As an example, the findings may say that an inmate who is 21 years old, with specific learning disabilities had a certain score on a test.

Right to withdraw from the study (Do I have to participate?)

You have the right to withdraw from the study at anytime without punishment. You cannot lose gain time and your release date cannot be changed if you choose not to participate. You do not have to give a reason.

Whom to contact if you have questions about the study:

J. S. Cornell, Graduate Student, Department of Educational Leadership, Educational Supervisor, Cross City Correctional Institution, P. O. Box 1500, Cross City, FL 32628. Dr. James Doud, Department of Education, Educational Leadership, Norman Hall, University of Florida, Gainesville, FL 32611, phone 352-392-

Whom to contact about your rights as a research participant in the study:

UFIRB Office, Box 112250, University of Florida, Gainesville, FL 32611-2250; 352-392-0433.

Agreement:

I have read this, or have had it read to me. I understand that I have the right to participate or not, without any penalty. I also understand I can change my mind at any time. I know I can write the University of Florida, IRB office if I want to know more about my rights. I have received a copy of this form for my records.

Participant: _____ Date: _____

Principal Investigator _____ Date: _____

APPENDIX B
FLORIDA DEPARTMENT OF CORRECTIONS RELEASE OF DATA

STATE OF FLORIDA
DEPARTMENT OF CORRECTIONS
RELEASE OF RESEARCH DATA

Title of Project: _____

Primary Researcher: _____

Institution or Location Involved: _____

I am a voluntary participant of the above research and understand that information given is to be used in research and possibly will result in a published document.

SPECIAL CONDITIONS:

Interviewee

Date

Researcher

Date

DC2-702

APPENDIX C
STATISTICS FOR RANDOM SAMPLE

Cornell, Suzann

From: Lewis, John L.
Sent: Tuesday, March 18, 2003 2:32 PM
To: Cornell, Suzann
Subject: Requested Random Samples & Documentation

Suzann,

Find attached the lists of random samples (stratified, by facility) that you requested. Also, find below some SAS documentation on the random sampling that was done to get the lists.

Thanks.
John L.

The SAS System 11:32 Tuesday, March 18, 2003 1

The SURVEYSELECT Procedure
Selection Method Simple Random Sampling

Input Data Set [REDACTED]
Random Number Seed 42306
Sample Size 150
Selection Probability 0.198413
Sampling Weight 5.04
Output Data Set [REDACTED]

Selection Method Simple Random Sampling
Input Data Set [REDACTED]
Random Number Seed 45817
Sample Size 150
Selection Probability 0.280374
Sampling Weight 3.566667
Output Data Set [REDACTED]

Selection Method Simple Random Sampling
Input Data Set [REDACTED]
Random Number Seed 46054
Sample Size 150
Selection Probability 0.117555
Sampling Weight 8.506667
Output Data Set [REDACTED]

Selection Method Simple Random Sampling
Input Data Set [REDACTED]
Random Number Seed 46530
Sample Size 150
Selection Probability 0.132159
Sampling Weight 7.566667
Output Data Set [REDACTED]

Selection Method Simple Random Sampling
Input Data Set [REDACTED]
Random Number Seed 46876
Sample Size 150
Selection Probability 0.136612
Sampling Weight 7.32
Output Data Set [REDACTED]

Selection Method Simple Random Sampling
Input Data Set [REDACTED]
Random Number Seed 47252
Sample Size 250
Selection Probability 0.645995
Sampling Weight 1.548
Output Data Set [REDACTED]

Locations are blacked out for confidentiality.

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BIOGRAPHICAL SKETCH


I was born on July 18, 1953, the youngest of three children, born to parents who endured the hardships of the depression. My father was born into poverty, but overcame the odds to become the first in his family not only to attend college, but he continued on and became a successful attorney. My mother and father met as children in rural North Florida. Both of my parents, and one sibling are now deceased.

According to my grade-school teachers, I was the classic underachiever. It could be true that I became the classic "late bloomer." It is probably more accurate to say that my emotional development finally caught up with my age and I began to take life, including education, more seriously.

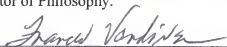
Perhaps one of the most sobering lessons in life is the realization that you must be the person you want your children to emulate. Once I became a parent, I began to understand my responsibilities to someone other than myself. At the age when many people are settling in to a career, I began the completion of an abandoned journey in education. I was fortunate to have the support and encouragement of my best friend, my husband. I did not receive my bachelor's degree until I was 36 years old.

Once I accomplished my initial goal of a college degree, I became increasingly eager to learn more. As I have followed my educational path, I have discovered that the more I learn, the more I learn there is to learn, and understand how little I ever will learn. It is a race with time.

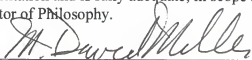
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Foundations

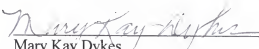
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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.


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Professor of Educational Psychology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.


Mary Kay Dykes
Professor of Special Education

This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

December 2003


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